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ABSTRACT

The responsibility and relationship of the Asian system of higher education to the masses is the theme of these proceedings of the German Foundation for International Development (DSE) and the Regional Institute of Higher Education and Development (RIHED) joint conference. Objectives of the conference were the following: (1) to examine the existing state and foreseeable trends of the development of higher education and research in Asia in general and in Southeast Asia in particular; (2) to analyze the role of higher education with special emphasis on its impact on rural and urban masses; (3) to exchange experiences between German university staff, Asian experts and German cooperating agencies concerning higher education and research; and (4) to take stock of the experiences and results from bilateral, regional and international cooperation in higher education and research and to discuss and develop guidelines and proposals for the promotion of existing projects and new projects and new projects. Some of the several conclusions drawn at the conference were these: there is a need for Asian institutions of higher education and German agencies concerned with aiding such institutions; Asian institutions must determine the needs of the population by conducting appropriate research studies; and support UNESCO and other international organizations in their attempt to develop useful strategies for Third World nations. Appendices include: the conference program, list of participants, steering committee, list of acronyms, the DSE, the RIHED, and extracts from the Educational and Scientific Aid Programme of the Federal Republic of Germany. (IC)

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HIGHER EDUCATION AND THE MASSES

Proceedings of the Joint International Conference
Held in Singapore
1-9 September 1977

under the joint auspices of

The German Foundation for International Development
Deutsche Stiftung für Internationale Entwicklung (DSE)

and

The Regional Institute of Higher Education and Development

in collaboration with

The German Agency for Technical Cooperation
Deutsche Gesellschaft für Technische Zusammenarbeit (GTZ)

and

The German Academic Exchange Service
Deutscher Akademischer Austauschdienst (DAAD)

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PREFACE

"Higher Education and the Masses" is undoubtedly an eye-catching theme for a conference taking place in Southeast Asia, one of the world's regions with the highest population density. In spite of the sensitiveness of the topic, it was chosen for an international conference with German academics serving at Asian universities and Asian experts in higher educational development. The conference was jointly convened by the German Foundation for International Development (DSE) and the Regional Institute of Higher Education and Development (RIHED) in Singapore, 1-9 September 1977. It was the third of a series of such DSE conferences (1975 in Latin America, 1976 in Africa) in collaboration with the German Agency for Technical Cooperation (GTZ) and the German Academic Exchange Service (DAAD).*

But is the theme an eye-catcher only? No, it is, in fact, a topic which, in view of the rapidly growing population in Asian countries and in accordance with the present world-wide discussion on basic needs strategies for development, deserves the highest attention of all responsible workers in education and development: the politicians, the planners, the educators, the administrators, those on the top and those in the field.

To be a little more precise, the *and* between "higher education" and "the masses" should be replaced by a different conjunction. Could it be "Higher Education *of* the Masses", taking into account the immensely growing pressure from the "masses" of those who seek access to higher education? Or should it read "Higher Education *for* the Masses", focussing on the mobilisation of higher education for the benefit of the politically, economically and socially underprivileged majority of the world's populace?

The conference queried both aspects when asking

- How do systems of higher education in Asia respond to the large and ever increasing student population in relation to quantity and quality of training, manpower needs, employment situation, social stratification, etc.? and
- How does higher education in Asia directly or indirectly contribute, through its threefold function of teaching, research, and community service, towards meeting the basic needs of the masses like income, nutrition, shelter, health, education and training, communication, and participation in the nations' overall development?

This report reflects the wide-ranging views and experiences that were exchanged without, however, trying to cover all the problems implied in the theme of the conference. Taking into account the interests of the participants and the German institutions represented, the conference title could have been enlarged by adding: "... and the role of intra-Asian and German-Asian cooperation". In fact, the second part of the conference programme was guided by the following questions:

* Reports of these conferences are available upon request from the German Foundation for International Development (DSE), Higher Education Section, Simrockstrasse 1, D-5300 Bonn 1, Federal Republic of Germany.

- What endeavours do Asian countries undertake in cooperation with other countries on bilateral, regional and international levels in order to overcome the most urgent problems and to find long-term solutions? and
- What are and should be the conclusions for aid to education and research in general and for German-Asian cooperation in particular as related to concepts and priorities, instruments and coordination of activities in the promotion of higher education in Asian countries?

Numerous recommendations addressed to both Asian and German institutions have been brought forward, and guidelines have been developed under which future cooperation should attach more weight to programmes and projects that can be expected to gear higher education more closely towards the "needs of the masses". During the conference Southeast Asia served as a "sample region" but information, experiences and conclusions were drawn from other Asian countries as well.

Whether and how far guidelines developed will be accepted and followed by national governments, universities, aid agencies and other institutions will depend entirely on their own will and decision. It is outside the control of either RIHED or DSE to take any active part in political decision-making and streamlining administrative procedures of cooperation programmes. What both DSE and RIHED are able to offer is, in accordance with their long established aims and in following up this conference, to help to increase, through further studies, seminars and workshops, the awareness, willingness and capability of those responsible for higher education and development in such a way that "higher education *for* development" may become a reality.

For this, the present report gives some food for thought. Not only does it reflect precisely the course, content and outcome of the deliberations but it also provides information and experience from a large number of Asian universities.

Of the many papers presented during the meeting, only three could, for reasons of limited space, be printed in full length; the others had to be summarized.*

It is here that we wish to express our sincere gratitude to Dr. Annie B. Elliott (Singapore) who has edited this report with greatest care and aptitude.

We are very grateful also to the representatives from institutions in Asia and the Asian and German experts who all contributed so actively to the conference.

For both DSE and RIHED, the conference was a first joint undertaking. The experience we had together encourages us to cooperate further in the field of our common interest — "higher education and development".

Dr. S. Nasution
Director, Regional Institute of
Higher Education and
Development (RIHED)

Hartmut Glimm
Head, Higher Education Section
German Foundation for
International Development (DSE)

* Conference papers may be ordered from DSE.

A DSE Reader on "University, Science and Development in Asia" (2 volumes), edited by Detlef Haude and Hartmut Glimm as background material for the conference, is planned to be published later as a book.

INTRODUCTION AND SUMMARY

I. OBJECTIVES

The objectives of the Conference were:

1) To take stock of the existing state and the foreseeable trends of the development of higher education and research in Asia in general and in Southeast Asia in particular;
2) To analyze the role of higher education and research in socio-economic development with special emphasis on the impact on the rural and urban masses;
3) To exchange experiences between German university staff, Asian experts and German cooperating agencies concerning higher education and research;
4) To take stock of the experiences and results from bilateral, regional and international cooperation in higher education and research and to discuss and develop guidelines and proposals for the promotion of existing projects and new projects.

II. PARTICIPANTS

On the German side the Director of the Conference was Mr. Hartmut Glimm, Head, Higher Education Section of the German Foundation for International Development (*Deutsche Stiftung für Internationale Entwicklung* [DSE]), and there were present two officials from the Federal Ministry for Economic Cooperation (*Bundesministerium für wirtschaftliche Zusammenarbeit* [BMZ]), one official from the German Agency for Technical Cooperation (*Deutsche Gesellschaft für Technische Zusammenarbeit* [GTZ]) and two officials from the German Academic Exchange Service (*Deutscher Akademischer Austauschdienst* [DAAD]).

On the Southeast Asian side the Directors of the Conference were Dr. S. Nasution, Director, and Dr. Banphot Virasai, Deputy Director of the Regional Institute of Higher Education and Development (RIHED) in Singapore, and there were present official representatives of the RIHED Governing Board, the Agricultural Development Council (ADC), the Asia Foundation, and the Southeast Asian Ministers of Education Organisation (SEAMEO). Also present in their personal capacities were the Director of the Unesco Regional Office for Education in Asia, the Director of the Bureau of Science and Technology of the Association of the Southeast Asian Nations (ASEAN), and the Executive Secretary of the Association of Southeast Asian Institutions of Higher Learning (ASAIHL).

There were 28 German participants sponsored by GTZ or by DAAD, who came to the conference from their work in the following countries: Afghanistan, India, Indonesia, Iran, Jordan, South Korea, Pakistan, Philippines, Singapore, South Korea, Taiwan, Thailand, and Turkey.

Among the participants were 12 Asian experts in the academic fields or in administrative responsibility for educational and development policy from India, Indonesia, Malaysia, Philippines, Singapore, South Korea, and

Thailand. From the counterparts of the GTZ projects in India, Indonesia, Jordan, Thailand, and Turkey there were six Asian participants.

III. STRUCTURE

1. Opening Session

Before an official opening address by the Chargé d'Affaires of the Embassy of the Federal Republic of Germany in Singapore, Dr. S. Nasution outlined the real needs of the masses in the developing countries of Asia, and Mr. Hartmut Glimm gave an introduction to the scope and theme of the conference. He called for a discussion of the most crucial problems so that they might be identified, and the limited aid available might be directed to problem areas.

Dr. Swasdi Skulthai, Director of the Bureau of Science and Technology of the ASEAN Secretariat, gave a thought-provoking keynote address. He outlined some of the problems arising from the demand for higher education, which occurs simultaneously with the development process, and offered for consideration two possible models which might be suitable in the contrasting environments of the city and the countryside. In regard to aid from more developed countries, Dr. Swasdi emphasized that the community receiving aid must later be able to reach a stage of self-help where it can maintain the gains after the aid situation has finished.

Speaking for the German Federal Ministry for Economic Cooperation (BMZ) Dr. Wolfgang Armbruster outlined the principles, objectives and types of cooperation in higher education and research offered to the developing countries in Latin America, Africa and Asia. Dr. Wolfgang Küper (on behalf of GTZ), and Miss Marga E. Schmitz (on behalf of DAAD), explained the organisation and mode of operation of each agency, describing the possibilities for giving aid, and the constraints which applied to it.

2. Plenary Sessions

In six plenary sessions there were presentations on the existing situation in the Asian countries. Papers were presented to the conference by both Asian and German participants, which outlined the conditions in particular countries, and opened up discussion about the needs of these countries and others in similar situation. In every plenary session there was wide ranging discussion after the delivery of the papers, and a concerted effort was made to identify specific problems.

3. Working Groups

After the fourth plenary session, participants were divided into three working groups according to the three sub-topics, teaching, research, and community service. Each group spent three sessions in workshop discussion, attempting to delineate the response of higher education systems to the growing demand for higher education, and the ways in which the needs of the masses could be met.

In a plenary session, the rapporteurs of each group reported on the outcome of these discussions, and a general discussion was held.

4. Regrouped Working Groups

It became apparent that when participants tried to suggest appropriate methods by which aid could be rendered by Germany to the Asian countries, the division by topics (teaching, research, and community service) would not be so useful as a division by types of institutions of higher education. It was recognised that in the developing countries three categories of institutions could be delineated, namely *metropolitan*, *local*, and *regional*.

i) Metropolitan Institutions. In most developing countries institutions of higher education were first set up in capital cities. Influenced by their environment, these institutions have now developed a metropolitan character. Metropolitan universities usually have high academic standards, links with overseas institutions, emphasis on research, and a magnetic attraction for students who come from the countryside to study, and after graduation remain in the metropolitan area.

ii) Local Institutions. At a later stage in development there come to be established institutions which for purposes of this conference are designated by the name "local". They are geographically situated to serve a locality, a province or an ethnic group. Such institutions are often less well endowed than the older metropolitan institution, they usually emphasize teaching more than research, are oriented towards applied rather than "pure" subjects, and may carry less prestige than the metropolitan type of institution.

iii) Regional Institutions. In this context "regional" is used in its supra-national meaning. Regional institutions have been established in various ways. They are usually international, and tend to lay much emphasis on research and international collaboration. There are two types of such organisation. They may be, firstly, institutions of higher learning, which may or may not award degrees; or, secondly, associations of institutions whose aims are to promote advanced learning and research.

In order to give more careful consideration to the needs and functions of these three categories on institutions, the working groups were rearranged, and in the last session three groups of participants discussed how German/Asian cooperation might serve the masses *through* the three types of institution — local, metropolitan and regional. Attention was given to the policies, programmes, implementation and evaluation of cooperation in each type of institution.

Reports were presented to a plenary session from each of the working groups.

5. Final Plenary Session

In the final plenary session the diverse views of the participants were assembled, and suggestions were formulated as to how German agencies and Asian institutions could cooperate to meet the needs of the masses in the developing countries of Asia.

IV. HIGHLIGHTS OF THE CONFERENCE

1. Higher Education in Asia – for whom and for what

Two papers which went to the roots of the matter, and provoked much discussion were contributed by Professor Wu Teh-Yao of Nanyang University, Singapore and by Dr. Rainer Jerosch from the German Federal Ministry for Economic Cooperation.

Professor Wu described some of the problems of higher education facing new nations, and spoke of the need to have a national purpose in higher education. He suggested that statesmanship was needed, that Ministries of Education should undertake the tasks of directing, coordinating and guiding, and that equal opportunity and meritocracy should be the guiding principles, while always taking account of the political, economic, social, cultural and religious environments of the country concerned.

Dr. Jerosch highlighted the cultural conflict which is engendered when modern technology, having its roots in the intellectual processes of the European Middle Ages, is transplanted to regions with different cultures and value systems. He called for a frank analysis of the foreign element in higher education, and an awareness of the cultural conflicts. He urged the conference to understand this conflict and overcome its retarding effects.

2. Universities and Manpower Needs

The function of universities was generally considered to be a combination of the traditional concept of fostering and extending knowledge, and the modern concept of furthering development of the community and the nation. But it was felt that the pressure on the universities now comes from the demands of the aspirant students, who see the university principally as a gateway to employment. This led naturally to much discussion of the degree to which university education should be job-oriented, and the political danger of "educated unemployment" was brought up more than once. The speakers originating from the more developed countries were in general more in favour of well controlled manpower planning, while those from developing countries tended to favour more open access to higher education. For some participants this was a theoretical discussion, since as they pointed out manpower forecasts in Europe had usually proved to be far wide of the mark.

3. Quality versus Quantity

A very real problem to a developing country with limited resources is the choice between quantity or quality, i.e. whether to spread these resources widely or to optimize them to a limited number of students. With the exception of Singapore the policies of the Southeast Asian countries as described by participants seemed to be in favour of spreading available resources as widely as possible, while making efforts not to impair quality.

4. Service Rendered to the Masses – Direct or Indirect?

Two opposing views were enunciated during the conference. One view was that the universities must respond to the demands of the masses, facilitating entry to the university, going out to serve the rural people, "coming down from the ivory tower". The other view was that the nature of universities is

such that their service to the masses is necessarily rendered indirectly — by providing high level leadership, by undertaking developmental research, and by acting as centres of thought and activity. There was evidence of countries having both types of service provided by different universities. If this is so it is a relevant point to be considered in thinking of cooperation with the German agencies.

5. Local, Metropolitan and Regional Institutions

Most of the experience of the participants had been in universities of the metropolitan type, and clearly because of their similarity to European universities the metropolitan universities would offer a more congenial and acceptable milieu to western academics, then would the local or provincial institutions.

There was some evidence of a wish on behalf of the developing countries to have aid and cooperation for their local institutions and this raised high interest on the side of the representatives from German agencies. On the other hand, it was suggested by some participants that German aid could best help the local universities by first helping the metropolitan universities, and allowing the influence there to percolate down to the local level.

There was a strong suggestion from the Asian participants that regional institutions would be the best channel for German aid. This may have been because regional cooperation does work in the Southeast Asian situation. From the German side the point was brought forward that cooperation with institutions under the aegis of two or more Asian governments would present diplomatic problems. It appeared that these problems could be surmounted, and there was repeated and hopeful discussion of the ways in which regional cooperation could be stimulated and enhanced.

6. Non-traditional Methods of Education

In an effort to satisfy the demand for higher education, Thailand and Indonesia had embarked on new and non-traditional ventures in higher education, and these were described by participants in some detail. Other countries also had started to use mass media, making higher education available in the rural areas and to vary or remove selection processes thus opening wider the door of entry to the universities. Study service was increasingly being accepted as a part of the educational curriculum in Southeast Asian countries. It was noted that the evidence of these non-traditional methods came predominantly from the Southeast Asian countries, and at least at this conference seemed to bring only little echo from participants from other parts of Asia.

7. Governmental Policies & Strategies of Development & Cooperation

The tacit assumption was made at all times that policy in each country was determined by and determined solely by the elected government. Within the framework of their various policies most Asian governments were seen to have been following a strategy of modernisation, with industrialisation and emphasis on productivity. In this situation there had been need and opportunity in the recent past for cooperation between German agencies and

Asian universities to take the form of support in teaching and research with an emphasis on technology. Although there were no official spokesman for the Asian governments, their changing attitudes could be observed and discussed, and the ECOSOC document was quoted as the pattern of integrated development strategy towards which some governments were now moving. This type of strategy would need a wider spread of basic education, a consolidation, and an increase in availability of higher education. There was discussion as to whether, in this changing situation, German aid could move more into the technology of education and planning, giving help with such matters as institution building, design of organisational models, and joint research programmes designed to solve the problems identified in the Asian country.

8. Difficulties of the Isolated German Expert in a Developing Country

Due to the preponderance of German experts participating in the conference, it was natural that a number of reports and discussions dealt with their difficulties and the sense of frustration which they often experience. It was clear that the transfer of knowledge and technology from Germany to an Asian country was made more successfully — at least in the view of the German academics — when the institution of higher learning to which the academic was attached was larger and more similar to his *alma mater* in Germany. While no overt statement from any Asian government was presented to the conference, it was implied in some papers presented by Asian participants, that the needs of their countries might be best served by institutions of higher learning which were very different from the universities in Germany. There was open acknowledgement of the similar difficulties which face the young Asian academic who is the recipient of a scholarship to study in Germany, and then faces in isolation in his own country the task of continuing his academic work under very different and difficult circumstances.

V. CONCLUSIONS AND RECOMMENDATIONS

While the direct contribution of Asian institutions of higher learning to the masses was seen to be different in the different countries of the region, the indirect contribution by the forwarding of each country's national development plan was seen to be very important in all the countries.

It was considered that foreign assistance in general and German cooperation in particular could play an important ancillary and stimulating role in the endeavours being made by the Asian countries. The means of initiation, organisation and evaluation of such cooperation were considered.

Detailed recommendations were addressed jointly and severally to the Asian institutions, to the German Federal Government and to the German agencies, with the hope that implementation of these recommendations might increase the effectiveness of future cooperation, enhance the contribution of higher education to development, and procure through more rapid development the greatest possible benefit for the masses.

CHAPTER 1

OPENING SESSION

WELCOME ADDRESS

by

Dr. S. Nasution
Director, RIHED

The Chargé d'Affaires of the Embassy of the Federal Republic of Germany
Members of RIHED Governing Board and Conference Participants
Honoured Guests
Ladies and Gentlemen

It is certainly a great honour and pleasure to extend on behalf of the DSE and RIHED my warmest welcome to all of you, and to thank you for your presence at this DSE-RIHED Conference on "Higher Education and the Masses". We feel confident that this conference, attended by so many important personalities with a wide and profound knowledge and experience in higher education in Asia as a whole and Southeast Asia in particular, will be fruitful and successful.

We want to express our deepest gratitude to all of you who have been so kind as to accept our invitation to attend this conference in spite of your tight daily schedules. We very much hope that you will all be able and willing to participate during the whole length of the conference to discuss the multifarious aspects of the rather broad topic of this conference.

This conference is arranged jointly by the DSE (Deutsche Stiftung für Internationale Entwicklung, the German Foundation for International Development) and RIHED (Regional Institute of Higher Education and Development).

RIHED was established in 1970 in a meeting of representatives of the governments of seven Southeast Asian countries (Cambodia, Indonesia, Laos, Malaysia, Singapore, Thailand, and Vietnam) attended by representatives of ASAIHL, SEAMEO, IAU, Unesco and the Ford Foundation. It is an autonomous institution which is administered by a Governing Board comprising government representatives of participating countries and representatives from their university communities. The purpose for which the Institute is established is to stimulate and facilitate cooperation among the universities and the governments of the countries in Southeast Asia and to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole.

Mr. Glimm will subsequently give some brief information on the purposes and activities of the DSE.

The theme of the conference "Higher Education and the Masses" aims at the possible contributions of higher education to the immense task of improving the social and economic conditions of the masses.

Education has been given an important role in the achievement of national development goals, and higher education with its intellectual

resources and expertise is expected to assume an even more important part in this endeavour. It is believed that the increased level of educational attainment of the population contributes to the economic and social development of the nation. Governments, especially the governments of newly independent nations, actively stimulate the demand for education by recognizing the right of every citizens to have education according to individual aptitude.

Parents generally regard school education, and in particular higher education, as the major avenue for social mobility and the attainment of a better position in society. Many of them are willing to suffer financial hardship to obtain the highest available education for their offspring.

Enrollments at all levels of education have rapidly increased as governments have tried to accommodate the evergrowing demand for education. Children who are presently in elementary and secondary schools would soon be knocking at the doors of the institutions of higher learning in great numbers, the more so if employment for high school graduates is scarce.

The rapidly rising demand for higher education will raise various problems concerning enrollment, selection, curriculum, quality of education, relevancy to society's needs, manpower planning and so on. It will also pose to policymakers the question of what education, higher education, in particular, is for in a country facing particular social and economic conditions. Obviously no simple solution can be formulated for these problems of immense and intricate dimensions.

The second aspect of the topic for this joint conference deals with the no less complicated problem of the need of the masses and its implications for higher education.

The world food crisis looms large as a problem, and prospects for the future are not encouraging. During 1975 some 1.2 to 1.3 billion people in developing countries were undernourished, i.e. comprising about two-thirds of the total population in those nations. Ironically those same nations have become more dependent on food imports although they are mainly agrarian in their economy. The food production in those countries has not kept pace with the need of the rapidly growing population.

In low income countries a family has to spend a substantial proportion of its meagre income for food, leaving thereby very little for other basic needs.

The poor living conditions in impoverished rural areas lead to a vast exodus of rural people to the cities, creating insurmountable problems of unemployment, housing, poverty, hunger, disease, and the like.

Poverty of the masses implies not only the inability to obtain certain material goods. It implies also that there is a lesser chance of life for the newly born babies and less chance to enjoy a longer life for those who face difficulties in obtaining medical treatment in countries with only one doctor to every 20,000 or even every 70,000 people, and particularly if those doctors are concentrated in urban areas.

In many cases there is also an absence or insufficiency of clean drinking water for the masses, not only in the cities but more so in rural areas. Lack of

supply of good drinking water contributes to the spread of various diseases.

Cheap but adequate housing becomes a major problem in cities in most developing countries due to rapid increase of the urban population.

The uplifting of the poor conditions of the masses is not only a gigantic task but also a very complex one, involving not only economic but non-economic determinants as well.

In many developing countries modernization, rationality, development, productivity, increased living standard, and social and economic equality have become ideals. Yet many inhibitions and obstacles such as traditional values and concepts hamper development and resist change. Low levels of living standard hold down productivity. Family planning is said to be most likely to succeed in countries with a high level of development.

This conference will give the opportunity to discuss these and many other problems pertaining to higher education and the masses. We hope that these discussions will result in causing a greater awareness of the relationship between education and the needs of the masses, and can eventually lead to real steps towards a more hopeful future for the millions who still live close to the margin of subsistence.

ADDRESS

by

Mr. Hartmut Glimm
Head, Higher Education Section
German Foundation for International Development (DSE)

The Chargé d'Affaires of the Embassy of the Federal Republic of Germany
Members of RIHED Governing Board and Conference Participants
Honoured Guests
Ladies and Gentlemen

Allow me, first of all, to say how pleased and happy I am to see you all here after a year of corresponding with most of you and only little contact with some of you.

There is a somewhat artificial grouping in the list of participants. I would like you to forget about that from now on. I welcome you all, and each of you personally, as members of a multi-racial, multi-national and multi-disciplinary representative sample of those who are devoted in some way or other to the advancement of higher education in your home or your host countries.

I say this my word of welcome also on behalf of my directors, colleagues and friends in the German Foundation for International Development. In order to avoid possible confusion let me briefly describe what the German Foundation is and what it does. Receiving all its funds from the German Federal Government and still being a private institution, the German Foundation has two major tasks to fulfill:

1. to serve as a platform and catalyst for the dialogue between North and South in all matters and fields of development policy and cooperation. To this end, the German Foundation convenes seminars, conferences, workshops and expert meetings at national, regional and international levels to which planners, decision makers, critics and "practitioners" are invited, as in the case of this present conference.
2. to provide for advanced training of high- and middle-level personnel from developing countries in short, medium and long term courses in various fields such as agriculture, technical education, development, banking, documentation and public administration management. A training programme of three months' duration is also offered to German personnel assigned to projects in Third World countries before leaving Germany.

In contrast to other foundations and organizations in Germany, DSE can neither staff nor fund "development projects" of whatever kind. There is, however, an observable tendency towards the establishment of medium and long term cooperation schemes with partner institutions in developing countries, with the objective of expanding and improving training programmes in various fields; as in Southeast Asia where we cooperate with SEARCA.

Ever since the German Foundation came into existence, it has been our

declared aim and practice to cooperate with such partner institutions, and I am most happy to say that with the Regional Institute of Higher Education and Development we have found a new partner in the very best sense of the word without whose assistance this conference would have had little or no chance of being opened today.

We have to name two more partners collaborating in this event: the German Agency for Technical Cooperation (GTZ) represented by Dr. Kuper, and the German Academic Exchange Service (DAAD) represented by Miss Schmitz. Both institutions have enabled the German university teachers coming from countries between Turkey and Korea to participate in this meeting, and both are most interested in, and open to, all kinds of information, criticism, proposals and suggestions concerning the policy and activities of German-Asian university cooperation.

The same is, of course, true of the German Federal Ministry for Economic Cooperation (BMZ) whose representative at this conference, Dr. Armbruster, is in charge of the Ministry's policy and programmes of assistance to higher education and research.

This conference is, as most of you know, the third in a series of regional meetings with German university staff attached to universities in developing countries. The previous conferences (1975 in Latin America, 1976 in Africa) had aimed at the same targets as are set for this event, namely

1. to collect information on, and analyze problems of, the present state and foreseeable trends in the development of higher education and research in the "host" countries, with specific consideration of the role that higher education and research can play as factors for overall development of the nations concerned, and

2. to assess the adequacy and efficiency of bilateral, regional and international cooperation in higher education and research in general and of the German contributions to this in particular, both being considered in the context of the aforementioned development functions, in order to come to conclusions for future concepts, instruments and concrete measures to be taken for strengthening such cooperation.

As you will have seen from the summaries of the two conference reports, many experiences and views have been exchanged, some criticism has been raised, and a number of new ideas has emerged. These reports reflect much of what is not only being discussed but also being implemented in the Latin American and African universities and, as far as I can see, also in universities in Asia. Even though these ideas may seem not very new to you, they have not yet found sufficient and satisfying implementation — neither in the countries themselves nor through Germany's or any other country's assistance. Also, there is no doubt that much of what had been stated with regard to Latin America and Africa will be applicable to the Asian scene. On the other hand, the two conferences have shown remarkable distinctions and different tendencies according to the particular situations in the two continents as well as in the individual countries. Therefore it can be expected that in dealing with Asian countries with specific consideration of Southeast Asia, we will

discover new aspects and approaches to problem-solving that differ again not only continent-wise but also from country to country. And that is why we wanted to have this third regional, the Asian, conference which will round up and at the same time differentiate the picture.

This time we chose, however, a more "catchy" theme for the conference — a theme in connection with which probably more questions will be raised than can possibly be answered.

Higher education and the masses — is there a connection between the two at all? Is it not the case that higher education concerns only the elites? Has this not been so for centuries in the so-called advanced Western countries? And why should it be different today and thus more difficult for countries that aim at the long accepted standards, the so-called international academic and scientific standards set by the Western countries? Does anyone really expect that some time in the future higher education will be accessible to the masses? Is it, after all, the access to higher education that the masses are really striving for? And, thinking of the ever increasing numbers of applicants, students and graduates — is it really the masses that cause these large numbers? Or is it not rather an expanding elite for whom higher education is being reserved — like first class seats in a full packed jumbo jet?

In any case, the increasing student numbers do cause "mass" problems in the "machinery" of the universities — problems which cannot be solved simply by enlarging the existing universities and establishing new ones. Thus, the question of how higher education systems respond to the growing student population stretches into the areas of ideological values, societal patterns and political practice on the one side and into the spheres of economics of education, educational policy and manpower planning, and pedagogical concepts and practice on the other. Obviously enough, we will not be able to cover the whole range of aspects that fall under this first sub-topic but we will have to restrict ourselves to only a few sections of the mosaic.

There is a second cluster of problems that deserves, may be, even more attention — at least from university teachers. If "mass higher education" is to be regarded as so far out of reach, we will then have to ask how higher education is being mobilized and utilized for the profit of the "masses". Indeed, "massification of higher education" is, above all, to be seen in all attempts to make higher education an instrument with which the "basic needs of the masses" can be more easily met. It would certainly be wrong to claim that the university should serve purely as an institution for the public welfare. But if the university is not able to mobilize knowledge and scientific methodology, prestige and influence for helping to meet the "needs of the masses", then the demand for a "higher education for development and social change" will remain a meaningless slogan.

Therefore we will consider these problems and will discuss how higher education in its functions of teaching, research and community service can be adjusted to meet these demands, i.e. how the organizational set-up, the content and the methods of academic training can be redefined in order to ensure that the outputs of higher education systems in terms of qualified manpower, research results and services rendered to the non-university sectors push forward social, economic and cultural change for the profit of the vast majority in our countries.

The "needs of the masses" — what may those needs be? It may be helpful first to determine who and what the masses are (do we ourselves belong to the masses? Where are the masses or their representatives — if they have any — at this conference?) Then, the needs of the masses may be more easily be defined or, at least, categorized under economic and social needs like employment and income, nutrition, health, education and training, housing, communication of all kinds, access to higher social strata, access to tools of modern life, etc.

One should, however, not reduce thinking to such needs alone. Political consciousness and knowledge, participation in civic life and political life at all levels, participation in the preservation of and, at the same time, change and exchange in cultural life, profit from scientific and technological progress for the improvement of living conditions — all these are categories to be filled with thought and action. And it is exactly thought and action along these lines that we want to stimulate and participate in through this conference.

Thinking and acting along these lines cannot be done by individual scientists, university teachers and administrators, planners and political decision makers alone. It requires communication, cooperation and coordination among all parties involved: the individuals, the institutions, and the countries and their governments. Therefore, we want in the third phase of the conference to consider and discuss how the countries cooperate in the development of their higher education systems, how they cooperate with each other and with countries in other parts of the world, what international cooperation has to contribute to this, and how such cooperation is being or can be utilized in the sense of our general conference theme.

This includes, of course, the cooperation between the Federal Republic of Germany and Asian countries. We are all aware of the fact that the German contribution to the advancement of higher education and research plays — in spite of the million of Deutschmarks and the hundreds of man years input — only a marginal role in initiating the immense problems Asian countries have to face and to solve on their own. This is, as will be shown later in the course of the conference, due to severe constraints on development aid in general and on educational assistance in particular. But in spite of this, or rather because of this fact, our contributions should be focused on the most crucial problems, and, at the same time, on the most promising approaches to be found in individual countries or regions. We have, therefore, allocated considerable time in the last part of the conference for discussion as to how German assistance to higher education and research in Asian countries may be redirected and more closely connected with the ideal we have in mind when we use the term "higher education for development".

I am convinced that we will have a very lively exchange of our views and experiences, of our hopes and doubts, of our criticism and maybe even of our mutual disagreement. In a meeting like this we should feel free from any false pretentions and from being forced to speak officially and think privately. We should use the opportunity of speaking to each other very frankly and listening to each other very open-mindedly, for thus alone can we ensure an atmosphere of mutual understanding and cooperative creativity.

Well, then, let us discover the phenomena, let us find their roots and reasons, and let us try and find ways and means to help create a real and fruitful interconnection between higher education and the masses.

ADDRESS

by

Mr. J. Chrobog
Chargé d'Affaires of the Embassy of the Federal Republic of Germany
Singapore

May I take this opportunity to welcome you on behalf of the Sponsors and Co-sponsors of this conference. As the Representative of the German Embassy I am particularly glad that you have chosen Singapore as the venue of this conference. This city, having ideal links throughout this region, offers excellent facilities for international meetings. This together with the experienced helps of RIHED provides a good basis for a successful conference.

Concerning the subject of your gathering, Singapore might not be a typical example for the problems in this field within the developing countries. Realising its priorities and knowing the demands in its future the Singapore Government constantly aims to improve the technical skills of its working force, and its professional. The development of this country proves that the transfer of technical know-how must be an important element as a part of the contributions of developed countries. Each year quite a number of students from all over the world do receive grants to study in the Federal Republic of Germany. From Singapore 11 young Singaporeans are leaving shortly for Germany to study Engineering Sciences.

The results of this conference and its success are not only essential in respect to the exchange of views and ideas between you and German experts on Higher Education in developing countries, but should also contribute to a new approach to and assessment of the cultural policies of the Federal Republic of Germany.

Cultural policy should not only include the classical meaning of culture but must take into consideration the needs of the developing countries. The most urgent demand is at present the education of the masses.

May I, herewith, declare this conference open. I wish you a successful and meaningful week.

KEYNOTE ADDRESS
HIGHER EDUCATION AND THE MASSES
"A THOUGHT"

by

Dr. Swasdi Skulthai
Director of Bureau of Science and Technology
ASEAN Secretariat
Jakarta, Indonesia

Mr. Chairman
Your Excellencies
Distinguished Delegates
Ladies and Gentlemen

May I first take the opportunity to direct a word of thanks and appreciation to the Regional Institute of Higher Education and Development (RIHED) and the German Foundation for International Development (DSE) for inviting me to participate in this conference. I deem it a great honour to have been chosen as a keynote speaker.

The title of the paper which I shall present to you today is taken from the theme of this conference, namely, "Higher Education and the Masses". However, keeping in mind the fact that there is a considerable number of ideas on this subject, you may note here that I regard the content of my paper as only "A Thought", and I believe that by the end of this conference, various other thoughts will have been produced which will certainly contribute greatly to developments in the field of education.

Let me, in the first place, attempt to make an analysis of higher education in relation to the masses. I personally think that the thoughts on this subject are concerned with five major questions, to be respectively listed as follows:

1. What is education?
   Education is the sum of the qualities acquired through individual instruction and social training (*Webster's Collegiate Dictionary*).

   In our time "education" is widely recognized as an additional basic human need besides food, clothing, shelter and health. This is because education is the process leading to that self-betterment of one's life which can be gained by learning, training and by experience in the environment in which one lives.

2. What is Higher Education?
   In brief, higher education usually refers to education after secondary education (or approximately after 12 years of primary and secondary education or at about the age of 18). What I would like to point out here is that the substance taught in Higher Education can be obtained not only through formal, institutionalized education but also by self-education or self-training at any age level; adults especially can acquire advanced knowledge by themselves all through their lives.

3. Education for what?
   In this respect, the answer that education is "for development" is inevitable. We all know very well that "development" means the "increase in function" of the individual. Most important is the increase in function in order to earn a living, i.e. "the employment". Those who are already earning can develop the ability to improve their living. How can one's employment be improved?

4. To whom does an educational institution belong?
   Does it belong to the President of the University, or to the academics, or to the Government, or to the students? Or, should it belong to the country, the nation, the people in a particular locality — to the community?

5. Do you really maximize all available resources for community use?
   The answer is, "Not yet really".

Now we can tentatively identify our problems concerning higher education and their relations with the masses.

From a brief observation of developments in education, there emerge five problems.

Problems

1. Surely it is true that everywhere there exists a *limited availability* of higher education for the masses, especially for the unemployed, the workers, and the farmers.

2. "Higher Education" is *very institutionalized,* especially in the so-called "University". Most of the time, resources have been channelled to the physical rather than the functional aspects of a university.

3. Higher Education places much reliance on *tests and examinations,* beginning from admission tests and carrying on to the final comprehensive examinations which torment the students. Only very few disciplines exist which pay more attention to the practical self-problem-solving approach, which is more appropriate and practical in terms of day-to-day use in the life of a man.

4. In regard to the problem of *research,* it does not seem overly presumptuous to assert that a majority of the scientists and the highly educated elites in developing countries have been trained abroad, particularly at the doctorate level. They have studied and taken courses at the universities in Europe and the United States where basic research is strongly emphasized. But, it is unfortunate that in their home countries the limitations of materials, resources and facilities for research obviously pose difficulties for these western-trained graduates. Therefore, they feel frustrated and yearn to return to the places where they were trained.

5. The problem of technology.
   The politicians and policy-makers who have been to the western-countries would naturally like to see technological development come about by imitation of the patterns of the industrialized countries.

Industrialization in the developed countries nowadays is capital-intensive with sophisticated techniques of automation. There is little room for new job creation to absorb labour. The industrial investment cost per worker is very high in the developed industrialized countries. But in the developing countries the form of technology development should be geared towards employment or towards labour-intensive rather than the capital-intensive projects.

Problem Solving

1. Higher education institutes should set up an active and continuing programme with more provision for the basic needs of the people in each community. The training of the less privileged people — the workers, farmers and the unemployed — should be considered as of high priority.

2. The university community should not confine itself only to the campus, but should extend its activities outside by cooperating with other educational institutions such as colleges and secondary schools as well as factories, farms, and even trading organisations or companies. These bodies can be used as training centres which can provide educational facilities for the people in that particular community.

3. The institutions of higher education should have multiple schemes for teaching methodology, especially in the technical and professional fields. In addition to this, a more practical and flexible method must be adopted for evaluating the educational standard of vocational training.

   The courses should be as widely elective as possible so that those who would like to be educated for specific employment can choose more practical courses according to their capabilities. On-the-job-training in order to create self-problem-solving abilities should be an alternative to traditional lecturing and theoretical examinations. The standard of the on-the-job training evaluation can be made equal to that of the theoretical examination which is less important in terms of its realistic usage for normal day-to-day living.

4. Research.

   With all the limitations of resources, the research projects should be devoted to "developmental research" with relevance to the natural resources existing in our own countries and should try to maximize the use and, at the same time, economize in these resources. However, those researchers who have talent in basic research should not be neglected and should be given research opportunities when we have more facilities.

5. Technology.

   The appropriate system of technology for a developing country must always be the type most suitable to the local situation. Labour-intensive investment projects with maximum utilization of the existing natural resources should be undertaken for industralization schemes.

Industrial development in the developing country must begin with an assurance of being able to market the produce.

Attempt at Modelling

Broadly, I would like to refer to two models of higher education suitable to the localities of the city and the country side.

1. In the city, where most of the institutions of higher education and the universities already exist, programmes of extension or continuing education must be intensified or initiated — in what one may wish to call a "College of University Extension". The administrative board of such a college should be composed of university academics and representatives from outside institutions, and must include especially such representatives from the private sector as industrialists and workers.

   All courses which have been requested should be open to the community for maximum utilization of university facilities to suit the requirements of all students.

   There should not be a so-called "terminal programme". Anyone who wants to study should be able to choose the courses he likes, and course credit should be given for studies. But it must be kept in mind that the standard of education has to be maintained.

   The university must be open to more enrollment. The student who cannot pass examinations at any certain level should be advised to shift to other practical courses with his own selection of the vocation he prefers, instead of allowing him to fail with no future. The student would then obtain a certificate or diploma to be used for his employment. The "College of University Extension" should provide advice and assistance to the students.

   Moreover, students who have already been working but who want to study in the evening after their working hours should be granted the opportunity.

2. In the provinces or in the countryside, there should be a community educational system which belongs to and is responsible to the community in the particular province. Educational programmes must be arranged according to the needs and types of employment in that region. Technical education relevant to the development needs of each community is desirable and must suit the labour market. In this connection, the higher education institutes must take the leading role and must cooperate closely with the authorities of the secondary schools. The higher education institutes should not confine themselves only to being degree granting agencies. They can provide education more broadly. All the credits of the students in the community educational system should be recognized and a mechanism of accreditation and transferring of credit to the university if required in the future, should be established.

Role of Aid Donor Agency

Educational aid as a policy cannot be profitable to the recipient unless the donor examines the base-line of the social and economic situation of the recipient. The donor should be exposed more to real problems and solutions.

In this respect, the recipient must identify the real needs which are relevant to the particular community. Apart from this, the recipient must keep in mind the fact that at a later date the community itself must maintain gains obtained from aid, and must show self-help at the end.

A development plan must be carefully formulated and benefits must be channelled to the community and to the people at large.

In the end, it is my sincere hope that in this conference our distinguished delegates will arrive at concrete proposals for higher education with particular consideration to its relation with the masses. I also hope that eventually we shall be able to find ways by which we can contribute to the solution of the difficult problems noted above.

The job we are doing is not easy, but I feel that if we pool our efforts, it is in the realm of possibility that we will achieve our aims.

ADDRESS

by

Dr. Wolfgang Armbruster
Senior Counsellor, Department of Education, Science and Mass Media, Ministry of Economic Co-operation (BMZ), Federal Republic of Germany

Distinguished Guests
Ladies and Gentlemen

I would like to welcome you on this conference on behalf of the Federal Ministry of Economic Co-operation, and I am glad that you were able to accept the invitation extended to you by the German Foundation for International Development. I hope that we will have meaningful discussions during the next nine days and that we will arrive at conclusions which can be put to good use for the benefit of higher education in Asia.

I would like to take the opportunity of this opening session to give you a brief outline of the aims and structure of the Ministry's policy towards supporting institutions of higher education for development.

1. Types of Cooperation in Higher Education

Cooperation between German scholars or institutions and scholars or scientific institutions in developing countries is, of course, older than development cooperation or any other state-supported cooperation. In Latin America especially, many German scientists have been working since the middle of the last century and have even directed the setting up of universities. With the Near East traditional scientific relationships also exist.

The development cooperation of today involves a variety of instruments and agencies on the German side. Official bilateral cooperation is carried out by the German Agency for Technical Co-operation (GTZ), but in many cases this agency stimulates the direct cooperation of universities. When projects include components corresponding to the usual programmes of the German Academic Exchange Service, DAAD, (scholarships, short-term exchange of faculty), then DAAD handles those components.

The scope of the programmes varies greatly. It includes the provision of materials on a small scale as well as large and complex projects like the cooperation which built up the Indian Institute of Technology at Madras, the biggest ever project of German technical cooperation. But more and more, a medium sized type of project prevails, which aims at the setting up or consolidation of one or more departments or a faculty in a university, and involves the provision of experts, equipment and training components on a middle level. Often these projects have been carried out in the form of an official partnership between the German and the foreign university. This has usually led to excellent scientific institutions which have contributed to the development of the society beyond mere teaching and research.

2. Principles of Cooperation with Institutions of Higher Education

The Federal German Government's principle for development cooperation stresses six areas in which it preferably wishes to support the efforts of developing countries. These are:

a) the struggle against unemployment and underemployment,
b) the establishment of an educational system responding to labour market conditions and needs of the society,
c) the improvement of rural areas,
d) the growth and diversification of the productive sector,
e) the improvement of techniques of planning and organization, and
f) immediate improvement of living conditions of the poor.

Universities are not directly mentioned. This means that they have to qualify for support through their contributions to solve problems in the six areas.

In German cooperation with universities, programmes contributing to the development therefore deserve priority. Such programmes may intend to improve the qualifications of graduates working in the six areas of primary concern. Concerning the immediate improvement of living conditions of the poor or the rural development in general, changes in curricula and aspirations of the graduates must be aimed at. Universities can also render services for the achievement of the primary aims by offering their workshops and libraries part-time for further training of the labour force or by designing and directing programmes of basic education, etc.

3. Targets of Cooperation in the Field of Higher Education

This leads to more specific targets of cooperation in the field of higher education:

3.1 To meet the manpower requirements of the labour market in qualitative terms, and to support the expansion of higher education only in those fields of applied natural and social sciences where there is a definite shortage of qualified manpower.

3.2 To strengthen applied research in universities and affiliated research organizations.

3.3 To expand the services which the universities render to the community (e.g. consultancy, design and development of products and processes, transfer of technology, non-degree teaching and adult education).

The worldwide discussion on the role of higher education documented, for example, in the numerous publications of RIHED or in the two volumes on "Higher Education and Development" published by the International Council for Educational Development, shows us that universities and governments as well as public opinion in developing countries have similar ideas on the further development of higher education. The training of undergraduate students will remain the most important task of the universities, but probably further expansion as well as criticism and advice will concentrate on post-graduate training, research and consultancy; and bilateral cooperation will follow this trend.

4. Measures of Primary Concern in the University's Fields of Activity

4.1 Concerning teaching, a better utilization of physical and personnel capacities should be supported. But even then it seems to be a prerequisite that, for the foreseeable future, graduates can be employed meaningfully. Otherwise, it would be better to use physical facilities for postgraduate programmes, non-degree programmes or continuing education in the evenings. The quality of the output of the universities is often criticized. So measures to improve this situation are most important. Cooperation therefore should be extended to curriculum development, teaching methods, and the further training of staff members enable them to fully apply equipment and other facilities and to direct their students according to the requirements of their jobs.

4.2 Postgraduate training for staff is therefore the most important thing to be supported. It should involve to some extent applied research and participation in outreach activities.

4.3 The research activities as such can be supported:
- if they will lead to solutions for relevant questions in a country's development,
- in so far as they contribute to the upgrading of the faculty,
- in so far as they are used in the context of postgraduate training to avoid students being trained by course work alone.

4.4 In industrialized countries the transfer of scientific results to technological knowhow is the task of a great variety of specialized institutions. In developing countries normally there is not yet so much differentiation, and a larger part of the transfer process must be done by the universities. Resulting consultancy activities are worth supporting as there is a great need for them, as they are likely to improve the relevance of teaching by a feedback effect, and as they create additional income to meet the current expenses of laboratories and to relieve staff from seeking income by outside work.

I hope the exchange of views with so many distinguished scholars either originating from the region or at least living there will help us to further improve our concept and the deployment of the instruments to make it a reality.

ADDRESS

by

Dr. Wolfgang Küper
Head, Department of Education, Science, Mass Media and Sports
German Agency for Technical Co-operation (GTZ)
Federal Republic of Germany

The German Agency for Technical Co-operation (GTZ) is a stateowned agency under private law. It has become the central executing agency in the field of technical co-operation of the Federal Ministry for Economic Co-operation since 1st January 1975, when it took over from the Federal Office for Development Aid (BFE) and the German Company for the Promotion of Developing Countries (GAWI).

On the basis of a general contract and in accordance with the development policy of the Federal Ministry the planning and implementation of bilateral official technical co-operation measures are transferred by the Ministry to our agency by individual commissions including the allocation of funds. Our agency draws upon available capacity in the public and the private sector as far as this is expedient and furthers the economic fulfilment of its duties. The agency is 100 per cent government owned.

According to these terms of reference, the specific fields of activity assigned to the GTZ are as follows:

- technical planning, control and supervision of measures (projects, programmes).
- providing an advisory service to other agencies responsible for economic development measures.
- provision of personnel services (recruitment, selection, briefing, sending out of special staff; personnel administration and welfare and technical direction via head office).
- provision of material services (technical planning, selection, procurement and supply of equipment).
- discharge of financial obligations in regard to partners in the developing countries.

There are three different kinds of business in which GTZ is engaged:

1. The commissions against payment from the Ministry: "Entgeltverfahren". For these projects and programmes GTZ holds full responsibility and takes the whole risk of mismanagement and administrative faults. This risk is restricted to DM 200,000 in each particular case.
2. The funds-in-trust commissions: "Treuhandverfahren". These measures are carried out on account and within the responsibility of the Government and GTZ bears no professional responsibility for these projects/programmes.
3. Commissions from bodies other than German Government Offices — that is from Governments of the developing countries, from the oil

producing countries or from international agencies for development assistance like the Worldbank, the so-called "Drittgeschaft". These contracts are in the full responsibility of the GTZ. It has to have the consent of the Federal Ministry for Economic Co-operation for them. GTZ bears the full economic risk for these ventures.

The first category of business accounts for 70–80 per cent of all our projects, the second for 10–20 per cent and the third for 10 per cent.

The central office of GTZ in Eschborn has about 600 staff members. We have approximately 1100 experts and approximately 1800 projects all over the world. Our annual turnover is approximately DM 500 million.

With regard to the usual commissions the realisation of projects starts from the Ministry, which decides, which projects are to be started. GTZ only reacts. This, however, does not mean that GTZ is prevented from making its own proposals for the realisation of projects, but when this is done the final decision still rests with the Ministry.

Regarding higher education within our agency this is part of the Department 31 "education, science, mass media and sports". Three of the six units of this department are concerned with Higher Education. We call these units "Fachbereiche", and the three units are: 1) Universities, Engineering; 2) Universities, Natural Sciences; and 3) Universities, Agriculture. These are about 90 projects — almost equally distributed over the three "Fachbereiche". The regional distribution is also rather balanced concerning the different continents and there are at present about 30 projects in Asia.

The assistance given in the field of Higher Education comprises the following instruments:

- recruitment of experts for teaching, research, planning and administration as well as technical staff for laboratories, workshops, etc.,
- recruitment of short term experts, such as visiting professors,
- scholarships for up-grading and study trips for future staff members of universities, which may be "sur-place", in third countries or in the Federal Republic of Germany,
- provision of equipment especially scientific apparatus and teaching aids, including books and journals,
- assistance in building up the material, technical and social infrastructure of the institutions of higher learning.

All these instruments can be adopted separately or can be combined within projects. Most of our projects cover different instruments. Usually projects are carried out in co-operation with German Universities, where individual staff members give special advice on professional questions and help with the recruitment of experts and the selection of equipment. DAAD administers all short-term professorships and scholarships which are included in these projects.

As at 1.1.77 there were 135 GTZ experts working with universities in developing countries. The following table gives a breakdown of these experts according to continents and different kinds of experts.

GTZ Experts in 1977 and 1976

	1.1.77			1.1.76		
Continent	Full	Integrated	Total	Full	Integrated	Total
Latin America	19	26	45	31	23	54
Africa	45	15	60	44	8	52
Asia	30	—	30	39	—	39
Total	94	41	135	114	31	145

As can be seen from these figures the number of GTZ experts in Latin America and particularly in Asia is decreasing. This is a rather new trend following the concentration of our development policy on the least developed countries, especially in Africa. During the sixties, with significant numbers of German experts at the Indian Institute of Technology in Madras and the University of Kabul, Afghanistan, Asia was the continent with the greatest number of German development activities in the field of higher education.

In view of the many problems of Higher Education and the Masses in Asia and the relatively small amounts of money and small number of experts on our side the question has to be put what contribution really can be expected from agencies like ours. The aim seems clear. According to the Development Policy Concept of the Federal Government of Germany the aim of technical cooperation is to improve the living conditions of broad sectors of the population in the developing countries. Development means development of man. It is social and economic development. This means priority has to be given to measures satisfying basic needs with respect to food, education, health and measures which further a more equal distribution of incomes and social opportunities.

We believe, that within the scope of social and economic development efficient educational systems are the basis of national independence, economic progress and social transformation within modernizing societies. Human knowledge is fundamental for social and economic change. On the other hand we consider that there is no direct influence upon development from investments in education. In accordance with relevant studies on social and private returns in education we feel that investments in primary education are more profitable than investments in higher education. Nevertheless we accept the steadily growing importance of science and technology within the international discussions on the new economic order of this world. Science enables man to transform his environment in relation to his aims. In this context the problem of development is clearly connected with the problem of development of science. Universities and research institutions here have a great responsibility.

In realizing our aims and opinions we face two main constraints. The first and main constraint for the time being is personnel. More and more it

becomes difficult in Germany to recruit experts for higher education. The reasons for this are varied: restrictions within universities and ministries of education, constraints on the labour market, and generally low reputation for scientific work within the developing countries. The other constraints is that we have not yet found a clearly operational concept of the contributions which institutions of higher learning can make to the pressing problems of the society. The constraint is due not only to these institutions, but also to the fact, that there is no clear overall theoretical concept of development.

In spite of these and other constraints we strive hard to reach our aims. In this we are guided by the following principles:

1. Universities and other institutions of higher learning in developing countries cannot be properly developed unless they have contact with similar institutions in the developed nations. That means that GTZ has to be in close contact with our German universities and with their organizations like DAAD. GTZ regards itself as a service-institution for the cooperation of German universities and universities in the developing countries. GTZ wants only to become active in fields which cannot be handled by the university partners themselves.

2. Cooperation in partnership is only possible between equal partners. Therefore we have to become a professional institution. This is also necessary because we are responsible to the ministry for the project implementation, and not just for the spending of the money. We try to do this by recruiting professional staff with broad experience from outside who are more than mere administrators, and by giving our staff in-service training by means of formal courses, participation in conferences and seminars, and in the organizing of our own workshops and discussion groups.

3. We have to improve the planning and implementation of our measures of assistance. They have to get a deeper professional outlook, and have to be geared to progress in the professional field. This means not only proper relation of the projects towards the particular professional area, e.g. agriculture, engineering, but also towards the structures and methods of higher education as such. We try to adapt the methods of functional planning of institutions of higher learning to our projects, as for example by a special study of our biggest project. We have established an advisory council for the evaluation of the process of teaching and learning in our projects.

4. Basically we adopt the concept of integration of educational components in larger programmes which concentrate on the infrastructure of development. We have developed this concept in a conference between the Ministry and GTZ based on results of studies which showed that large infrastructural programmes failed because they did not include educational and social components. This brings us to the problem of the internal organizational structure of GTZ which is characterized by units related to professional fields. This tends to affect adversely the implementation of interdisciplinary oriented programmes.

5. There is a need of co-ordination of our programmes. By this I mean more co-ordination between our projects and the special programmes which are offered by other institutions, but administered by GTZ (Surplace-scholarship-programme, scientific journals published by the Institute for Scientific Co-operation, Tubingen, provision of scientific literature by the German Research Association (DFG), scholarships and equipment provided by the Alexander von Humboldt Foundation). We try to include these programmes in the on-going projects. Moreover a stronger co-ordination between our projects and all the various instruments administered by the institutions themselves seems necessary.

6. We have to do something to challenge the interest of the development institutions, the ministry and the broader public towards the importance of education and science in the developing countries. Education as such does not have high priority, at a time when economics and mineral resources as well as real business (with OPEC states) is being given more and more importance within our development policy. We try to do something in this context by issuing as many publications as possible. We have published the description of all our projects. We plan to publish some descriptions of particular projects, for example the Indian Institute of Technology, Madras. We have started our own publication series within our department, through which we can issue information on expertise, general descriptions of our work or problem-oriented monographs.

7. We have to do much more than in the past to really cooperate with our partners in the developing countries. We must give all the service which is needed to achieve the maximum profit from our projects. We have to organize in our country and elsewhere all the expertise needed.

8. Cooperation in higher education must be flexible — in terms of personnel, instruments and organization. With regard to the different stages of development and the various situations of higher learning institutions there cannot be, as in the past, only one main focus — institution building — so that cooperation is devoted to the building up of stable and effective institutions. Instead, there is now need for cooperation in fighting well-defined, limited bottlenecks, in specified problem-solving research and in the supply and training of middle-level technical and scientific personnel.

9. Last but not least we must recognize that cooperation in higher education is a long-term business. Financial means and practical concepts for follow-up measures and for the institutionalization of long-term scientific contacts have still to be found.

ADDRESS

by

Miss Marga E. Schmitz
The German Academic Exchange Service (DAAD)
Federal Republic of Germany

The German Academic Exchange Service (DAAD) is a self-governing organization of the universities in the Federal Republic of Germany. It was founded in 1925, re-established in 1950, and has, according to its statute, the task of promoting international relations between universities, especially in the field of academic and scientific exchange.

The DAAD carries out tasks for the Federal Government, the Länder, and its member universities in the fields of international education and higher education policy as well as giving educational assistance in the countries of the Third World.

The DAAD's legal status is that of a registered society. Its members are German universities and their students.

The organs of the DAAD are the General Assembly, the Board of Trustees and the Executive Committee. The Executive Committee which is elected every four years by the General Assembly is composed of a President, A Vice-President and other personalities with particular experience in the field of international higher education and academic relations.

The DAAD maintains branches in London, Paris, New York, New Delhi and Cairo, as well as offices in Rio de Janeiro and in Nairobi. Their main task is the provision of information on the educational systems of both the Federal Republic of Germany and the various host countries or regions to the relevant universities and government offices, institutions, and individuals in Germany and abroad.

To implement the DAAD's programmes in Berlin (West), the Berlin Office was set up in 1964.

The activities of the DAAD can be divided into three areas:

- Promotion of education and training as well as research on the university level through exchanges of German and foreign academics between the Federal Republic of Germany and other countries.
- Promotion of appointments of German and foreign academic teaching staff for lectureships at German and foreign institutions of higher education abroad and in the FRG.
- Promotion of a reciprocal exchange of information on systems of higher education and possibilities of study at home and abroad through the publication and distribution of pertinent literature and through information visits, as well as discussion of questions connected with international academic exchange, in particular the mobility of teachers and students.

In 1976, the DAAD had approximately DM 90 million of largely public funds at its disposal (compared with about DM 2 million in 1956), to execute these tasks which have constantly grown in extent and complexity since the DAAD was reorganized in the 1950's. These funds are mainly made available

by the Federal Ministry of Foreign Affairs, the Federal Ministry of Education and Science, the Federal Ministry for Economic Co-operation, and the Donors' Association for Promoting Arts and Science in Germany. The sphere of influence of the DAAD can be seen from the present total number of exchanges: in the past year, about 16,000 people were sponsored of whom approximately 12,000 were foreigners and 4,000 Germans.

A few remarks should be added on the programme which concerns the German teaching personnel at foreign universities. This programme is carried out by the Vermittlungsstelle für deutsche Wissenschaftler im Ausland im DAAD, the so-called Liaison Office for German University Staff Abroad which is a special body within the secretariat office of the DAAD.

It has been established as an independent office in 1968 but has been incorporated in the DAAD Secretariat, but still has its own regulations in recruiting German personnel for foreign universities.

At present more than 100 Germans are members of the teaching staff at foreign universities. Their distribution is as follows:

29	—	Latin America
19	—	Asia
48	—	Africa and Near East
15	—	Europe

The duration of assignments which can be supported by the DAAD ranges from two to five years and should in no case extend beyond five years.

Besides the long-term assignments, short-term assignments from one to three months can be supported as well. In 1977 we led the possibility of supporting 70 short-term assignments of German teachers of all disciplines abroad.

The intention of this programme which is a new instrument within DAAD activities is the following:

- To support teaching and research at foreign universities and in particular at universities of developing countries outside the official German aid programmes.
- Support is given from university to university according to the request of a foreign university. German personnel should never be permanent. A German staff member should be replaced by a native staff member as soon as he is available.
- A German staff member should assist in building up special programmes (as postgraduate programmes), special research methods and should teach for a limited period.
- A German staff member should possibly go back to a German university and should be a link between the German university and the foreign university at which he is teaching.

After the "Vermittlungsstelle" has carried out its programmes of supporting long and short-term lectureships for almost 10 years, the German Academic Exchange Service is deeply interested in the result of the Seminar in order to receive new stimulation whether the instrument carried out at present is up to the demand of the universities in Asia and can be an instrument of promoting higher education for the masses.

We should be grateful not only to the German participants but specially to the foreign participants for their advice and their request for our cooperation, so that we may make common plans for the future.

CHAPTER 2

RESPONSE OF HIGHER EDUCATION SYSTEMS TO THE GROWING DEMAND FOR HIGHER EDUCATION

SECTION 2.1

TRENDS IN THE DEMOCRATIZATION OF ACCESS TO HIGHER EDUCATION IN ASIA

Victor M. Ordonez

Summary

It is accepted that in Asia, where population is expected to double and the employment base to treble before the end of the millenium, there will be a greatly increased demand for higher education. But even now the paradox is seen (especially in the Philippines and in India) of a simultaneous excess of graduates and a lack of professional leadership. This paradoxical situation is ascribed to the misfit between training and national needs, so that there is excess of graduates in education, humanities and commerce, and a lack of professionals in engineering, paramedical, technical and science fields.

The efforts of governments to ensure that higher education becomes accessible to more individuals, and their plans to extend the classes of individuals who have this access are reviewed in a number of aspects. Malaysia has made a strong effort to open access to a previously excluded ethnic group, and Thailand and the Philippines have made efforts to bring into the mainstream their ethnic minorities. Most countries (except perhaps Singapore) have concentrated efforts on bringing the rural population into the pattern of higher education, and in the Philippines a moratorium has been called on the further development of higher education programmes in the metropolitan area of Manila, thus pushing development to the rural area. Innovative methods (especially in Thailand and the Philippines) have been used to make higher education accessible to extra-mural students.

There has been a trend in all the Asean countries to try to open up higher education to all sections of the population without regard to economic status, age or sex. The first has been tackled by the introduction of a sliding scale of fees (in the Philippines), and the second by innovative programmes (especially in Indonesia). With regard to the question of equal access regardless of sex, there is still some debate on this.

In general the time-honoured method of awarding scholarships for higher education on the basis of intellectual superiority and prior academic attainment is now giving way to the more modern attitude of giving support on the basis of economic need.

THE PRESENT RESPONSE TO GROWING DEMAND FOR HIGHER EDUCATION IN INDONESIA

A.O.B. Situmorang

Summary

The major problems being faced in the development of higher education in Indonesia are related to the very rapid growth of the number of students and institutions. This quantitative growth has not been matched by the expansion of the necessary resources such as facilities and faculty.

The major problems are the enrollment problem, low productivity, strongly imbalanced development and inherent inability of the existing system to adapt to rapid growth.

To meet the rapid growing demand for higher education in Indonesia, and in accordance with the policy of National Development, the present development policy of the administration of education states the necessity for the establishment of a national system of higher education. Public as well as private institutions have to function more efficiently and more effectively. Each of the institutions has to accomplish its mission by fulfilling an assigned role. These roles are to be formulated by taking into consideration the potential of the institution, and its immediate environment as well as its remote one; unnecessary duplications and other kinds of waste of resources are to be avoided.

For the implementation of this policy, programmes are structured around two main groupings, namely, Improvement and Systems Development. An administrative tool is also provided — the so-called SP_4, which is a translation of the PPBS. This has been applied since the beginning of 1977. It is hoped that the national system of higher education in Indonesia will be able to function fully by about 1985.

HIGHER EDUCATION FOR WHOM AND FOR WHAT?

Wu Teh-Yao

The World since 1945 has been a momentous place. It has given birth to nearly a hundred nations. In 1946, the membership of the United Nations was 51 and as of 1976, it stood at 146. Political revolutions and social changes have been frequent and rapid. The world's power structure and social equilibrium have been shaken to their roots and foundations. Perhaps more momentous in this world of change of the remaining quarter of the 20th century is the general awakening of the masses to demand that their governments provide them with a better standard of living and to insist on their right to participate in the process of government at all levels, local, provincial, and national. No longer will the masses of humanity everywhere be content to remain within and be confined to the social status of their parents and ancestors. The human heart and the human mind are awakened and aroused with rising hopes for a better future however vain or distant those hopes may be.

Of more lasting value and impact in the awakening process of the masses is the clamour and demand for the right to receive education. In the new nations, the emotional sentiment is for more opportunities of education, the higher the better, the more high sounding the degree the better still, if not for them, it is for their children and their children's children. The harbouring of such a sentiment is understandable. It meets a psychological need — what one did not have or was denied is what one wants most. Since education in general and higher education in particular, was denied to the general population in the past, the emotional urge to acquire it is now powerfully intense. Perhaps a more realistic motivation is the prospect of attaining both name and gain through the door of higher education. This demand and urge to receive education at all levels, primary, secondary and tertiary, is an irresistible and irreversible trend unprecedented in human history. No nation, new or old, industrially advanced or agriculturally based can afford not to take heed.

For the new nations in particular, the problem is how to meet such a demand. But problems create problems, many of which are unforeseen. For instance, to meet the demand, the government has to provide funds for the building of more schools; more schools require more teachers, more equipment and facilities. More funds are needed. Then, another problem arises. How much is to be allocated for education in view of other demands such as defence, health care or other public works. The ever increasing heat of the pressure of numbers is on. More primary student population and more secondary student population means more tertiary student population. The end result is the phenomenal growth of student enrolment and institutions of higher learning, the colleges and the universities. The growth pattern in Southeast Asia is no exception. In 1949, Indonesia had only one university. There were no less than 322 colleges and universities in Indonesia in 1974. In the Philippines, the number has grown in 1974 to 400 from a mere dozen or so institutions before 1945.[1]

This rapid expansion and growth, while meeting the demand of quantity creates a number of consequential and related problems. The quality of

[1] See *The Growth of Southeast Asian Universities: Expansion versus Consolidation*, edited by Dr. Amnuay Tapingkae, the Regional Institute of Higher Education and Development, Singapore, 1974.

higher education is affected. Staffing becomes a serious problem. In some countries, a lecturer with a doctorate degree from a western university becomes a rare human commodity and he becomes a travelling salesman of knowledge, often repeating the same lecture, using the same notes, from one university to another. Teaching is and must be diluted. The end result is poor quality graduates with beautiful diplomas. One can even say with some sarcastic humour: the poorer the quality, the more beautiful the diploma. Many "universities" are legalized diploma mills. And there are many buyers who naturally equate diplomas with knowledge.

The turning out of hundreds and thousands of degree and diploma holders in turn creates a serious social problem. Can the nation absorb all these graduates in gainful and suitable employment? No nation in the Asean region can, including Singapore, where there are only two universities.[2] In some countries, the number of unemployed intellectuals runs into millions including a great number of Ph.D. degree holders. Furthermore, degrees vary in quality and worth from one institution to another. But the irony of it all is that the holder does not want to think so. A university degree is a university degree. Given the social and cultural environment of the countries of the region as it is, there is little practical hope that a person with a university degree would accept manual employment. If a university graduate becomes a bus driver or a conductor, such a person is not only looked down upon but ridiculed. Some even go so far as to say: "It is better not to be employed. To be a bus conductor brings a bad name to the university."

The proliferation of universities in post-war countries of Asean has created a special class of travelling professors and lecturers who sell their brand of knowledge from one university classroom to another. Not that they like to do it but out of the necessity of need and in some cases, academic friendship. The proliferation has also produced a special class of floating intellectuals of various shades of qualification, who are unable to find suitable employment and thus become social misfits. They are a weighty burden for the society and the nation which nourishes and educates them to the miserable and frustrated status they are in today. Perhaps, it is not too harsh or unfair to say: The more the universities, the more the diplomas; the more the diplomas, the more the unemployed; the more the unemployed, the more the social unrest; the more the social unrest, the more is the tendency towards instability of the nation as a whole.

II

Questions now arise: Are our universities and colleges irrelevant institutions of learning in our countries? Higher education is for whom and for what?

From the above cursory analysis, one cannot help but come to the conclusion that our institutions of higher learning have either over produced or have not produced the kind of graduates that are needed in society. Both hypotheses are correct. But in fairness, it must be said that some universities have not over-produced and their graduates have been gainfully employed by both the public and private sectors of society. Nevertheless, generally speak-

[2] The total enrolment of the University of Singapore and Nanyang University is less than 9,000 for a nation of 2.2 million population.

ing, our universities of the Asean region are just replicas of their western counterparts in form, structure, and curriculum content. The teaching staff are predominently men and women who had their education and training from western institutions of higher learning. It is only natural that they, with a few exceptions, will transmit the methods and values which they have acquired from the west. In some countries, the universities have to rely on expatriate staff "to meet the need" and on the justification "to raise academic standards". On the latter proposition, it is also understandable and desirable on academic grounds. But would not this create yet another set of problems? Should our universities set our standards comparable to the universities of the west? What western university? Standards, as we know also vary from university to university like our own. Will there be a threat to a local university if it is staffed by more and more expatriates in order to raise academic standards?

It is not anticipated that any local university will be dominated by expatriates. But it is a fact that by the historical process of this generation and by the nature of the education and training of our local academic staff members, the *expatriate mentality* exists. This poses a grave problem for the university as well as for the government and the nation as a whole. While the universities are situated within the boundaries of a national state, their outlook is foreign; while their support has come from the government and the public, they are not rooted in local soil, except for the buildings.

Higher education for whom? The answer seems to be clear. At the present time it is for those who can afford to pay for the tuition, and for that small minority of the population which is located in the big cities and towns. As far as the masses are concerned, higher education for them and their children is a thing of the distant future. But one may ask: Should all the people, the masses have the right to receive higher education or university education? With the prevailing political mood of the times of the right of "one man one vote" to decide the political affairs and future of the state, it is only natural that this right to receive education at all levels will be regarded as a self-evident one by the masses. But there is a difference between a political right and an educational right. An educational right has to be earned, by climbing the academic ladder through the vigorous exercise of the brain. By its very nature, higher education is for the few and not for the many. How few and how many? This question has to be separately answered by each country because of different needs, different social backgrounds, and different cultural heritages.

To answer the question is not easy for any government when the masses more and more are going to exercise their voting power to acquire other benefits and rights which they feel are due to them. Such a situation calls for educational statesmanship and the formulation of a national policy based on the principles of equal opportunity and meritocracy. It is not that everybody can or will be enrolled in a university. It is the emotional feeling and response as far as the masses are concerned, that there is equal opportunity of access to receive higher education based on merit that counts. These principles can be called safety valves for social mobility upwards. It is in human nature to climb upwards just as it is natural for water to flow downwards. The masses of people are also human beings like ourselves. In other words, the age of egalitarianism has come to stay.

Higher education for what? Is higher education to train future leaders,

scholars, specialists or workers for specific jobs and the needs of society? It does seem that a university in any one of the newly established and independent nations is expected to fulfil all these roles. But what is top priority? To produce leaders, scholars, specialists or workers for specific jobs? If they are to be for specific jobs, how many? If higher education is only to produce graduates to meet the needs, what needs? Is a university to produce graduates to grow cattle and chickens? Some have. Is a university to produce graduates to manage hotels and be good chefs? Some have. In spite of these attempts, evidently no university in a newly established and independent nation can produce all purpose and all types of graduates to meet the needs. Yet it is the expected role of a university in a new nation not only to produce graduates to meet the needs of society but also to produce future leaders and scholars. Thus, universities in the countries of this region and also elsewhere in the newly independent nations generally speaking, have become more or less training schools for all trades in the name of "needs". And the more the university tries to produce vocationally trained graduates the less does it produce educated men and women with culture and character and with the spirit to serve the nation and the society which nourishes them and provides the opportunities for them to receive the university education which many of their less fortunate compatriots do not have. It would seem then that an all-purpose university serves no real purpose. It is purposeless.

How to inject a sense of purpose into higher education, into the colleges and into the universities is a matter of national importance. It cannot be allowed to drift. Therefore, the responsible authorities of the government must muster the will and the talents of the nation to define clearly the national goal and purpose of higher education — education for whom and for what within the political, social, economic and cultural contexts of the country. The purpose should be towards academic independence which means making our universities and colleges truly national institutions of higher learning. For academic independence can sustain the spirit of national independence. No nation can really be independent if her most highly educated citizens are just academic imitators and borrowers. No university of our own can be a respectable institution if it is just a pale replica of its western counterpart.

Once the aim is set, then a group of men and women, the academic architects, so to speak, is to be selected by government appointment to structure the courses of instruction and the disciplines to be established in the universities and colleges. In this exercise, both boldness and initiative are needed. Traditions are made and can be unmade. An experiment which is new today will in time be accepted as a practice, if the ideas are proven sound *(For experiments in teaching at Nanyang University, see addendum)*.

Then comes another group of men and women, the administrators, the heads of the universities and colleges, the departments, the directors of the schools and institutes whose duties and responsibilities are to see that the aims and purposes, the curricular cotents are implemented and carried out in the classrooms, the laboratories, the offices and the dormitories. Just as important as this group of administrators are the teachers, the technicians and the workers without whose devotion to duty and cooperative effort all innovations and programmes will come to nought.

To oversee that the policies are faithfully carried out, a governmental agency, such as the Ministry of Education, must assume and play a decisive role. It must direct, coordinate and guide the universities, both public and

private as to their present programmes and future development, so that unnecessary duplication of efforts and proliferation of universities and colleges will be avoided. If effectively done, production of graduates in terms of manpower needs for the nation's progress and development could also be more realistic and manageable.

In retrospect, one could say: It is not that we do not know the problems of higher education which have been discussed, sometimes over again and again, it is that we do not know and are not sure of the solutions. The problems of higher education in this region as well as elsewhere in the newly established and independent nations, are intricately woven and enmeshed with social, economic, cultural, religious and most importantly of all, with political problems. Politics is the overriding factor affecting higher education. What started off as higher education and the masses, for whom and for what, ends up in the realm of politics. Therefore, the solution of the problems facing higher education lies in the political bodies of the government, legislative and administrative. It is a matter of mustering the political will and the social stamina to see that the policies and programmes of higher education of the country, once clearly defined and planned, are faithfully implemented.

ADDENDUM

At Nanyang University, two experiments in course content and teaching methods are in progress.

One is the emphasis on the study and research of local medium and small businesses and industries. Local case studies will be used to supplement and replace those of more established business schools from abroad. In time, the teaching materials will be of more local origin thus reflecting the social and business mores of the business sector of the nation.

Another is the experiments in improving teaching method in political science. It is a fourth year course, called: Selected Issues of International Relations. This course is intended to be one of integration covering the main areas of study of the discipline including political thought and public administration, but with emphasis on international issues and relations. The main thrust of the course is to enable the students to have a review of their studies over the last three years so that they will be able to see not only the trees but also the forest. In this way, it is hoped that the students will have a conceptual comprehension and outlook in the study of politics. It is a course combining the teaching and the learning processes of both the teacher and the students. The students are asked to write down 10 topics covering the areas of their studies for the last three years and also to present 10 titles of books pertaining to the fields of their study. These are graded as part of their course work. Each student is to write two typewritten pages per topic for presentation and discussion in class and in tutorials. Students are encouraged to make a summary and oral presentation of the paper and not to read it. Marks will be given for presentation as well as participation in class. In this way, the students are being trained to speak out and to face the audience. At the same time, a condensed form of writing is good training. Each topic will be accompanied by a bibliography. In this way, students are being trained in the use of materials for research and for their future advanced studies. The 26 topics for the whole academic year 1977-78 are mainly taken from 70 topics submitted by the students. A list of books in alphabetical order, selected by the students is used for reference.

THE CONFLICT BETWEEN THE SOCIAL DEMAND FOR OPEN ACCESS AND THE DEMAND FOR ACADEMIC QUALITY IN KOREAN HIGHER EDUCATION

Ran Soo Kim

Summary

Korean system of education has witnessed phenomenal change in size since 1945. The total population of those in education has been increased from 1.46 million in 1945 to 9.39 million as of 1976. In terms of enrollment percentage by the eligible age group, elementary school population increased from 64 per cent to 97 per cent, that of secondary school from 4 per cent to 56 per cent and tertiary level from less than 1 per cent to 8.7 per cent respectively.

There is, however, a crying social demand to open access to colleges and universities for the students. Thus a policy is made to increase college enrollment quota from the current 8 per cent to 12.5 per cent during the period 1977-1981. Student admission quota which is under government control will be increased differentially by the type of institutions and courses.

In massive expansion, however, the qualitative aspect is apt to be ignored. In an attempt at quality control of higher education, the government initiated academic reform projects through pilot colleges. For the development of programmes and selection of pilot institutions, an evaluative committee which consists of professors is appointed by the government. The committee is also monitoring progress in institutional performance and making assessment of its action research programme effectiveness. The governments' administrative support and financial aid for research and development are made differentially to the institutions in accordance with their accomplishments. In a sense, the idea of meritocracy is applied to institutional aid by the shared authority and responsibility between academic and bureaucrats.

Now the programmatic accreditation is being extended to graduate and professional education. The conflict between the social demand for open access to higher education, and the academic demand to preserve quality education in contemporary advanced knowledge society will be mediated by academics in collaboration with public servants in Korea.

DISCUSSION

1. What is Higher Education?

The Chairman, Mr. Raja Roy Singh, defined higher education as a "diversified response to a country's needs". This, he suggested, was not necessarily present in universities, and he went so far as to suggest that for effective higher education it might be necessary to "de-universitise" the universities. Few countries, he felt, had made extensive plans for higher education, and the universities having achieved a position of primacy were then bolstered in their exclusive position by foreign aid and by their consequent emulation of foreign institutions. This exclusive position they then defended by the use of examinations. He suggested that if the universities were to serve the masses then the problems of the masses must become the focus of their thinking.

Dr. Swasdi had defined higher education in his keynote address as "education after 12 years of school education, or at about the age of 18". He pointed out in discussion that at least in Thailand and in the United States all post-secondary education was regarded as "higher education". Nevertheless most of the participants in the discussion took "higher education" to be synonymous with "university education".

2. Higher Education for Whom?

In response to Dr. Wu's question "Higher Education is for whom?" it was suggested that "education belongs to the people"; but as pointed out in Dr. Wu's paper higher education by its very nature must be for the few and not for the many. Another suggestion was made that higher education must be made available to the *rural* masses, and the action taken in the Philippines was mentioned whereby further development of new institutes of higher learning was forbidden in metro-Manila, thus forcing the development of new institutions out into the non-metropolitan areas. The question was asked, "How could teachers of higher education be motivated to go out to the rural areas?"

In considering the provision of higher education for the masses it was said that we should question in our present situation, not the *number of* persons having access to higher education, but rather the *exclusiveness* of the selection processes which we apply.

Dr. Ordonez elaborated what he had said in his paper, and said that there were two strictures applying:

a) higher education must be made available to the masses;
b) there must not be over-production which would lead to unemployment.

He felt that these two stipulations were not self-contradictory; and he put forward the idea that the democratisation of higher education should produce, not greater numbers, but a more healthy mix. He urged the participants to think not of increasing numbers of entrants, but of new ways of controlling access to higher education. If access were democratised we would have to pay a price in quality as measured by examination-passing ability, but there could be gains in contribution to national development.

3. Higher Education for What?

Dr. Wu's question "Higher Education is for what?" led to the reply that higher education satisfied the needs of the individual and the nation. Dr. Swasdi considered that most individuals wanted education for employment. Other reasons suggested in respect of the individual were for prestige, or for

money (the point was made that big salary differentials exaggerated this component); while the nation needed higher education for specialised manpower for development, for economics and trade, and for national leadership. In some countries no attention had been paid to the manpower/employment facet for many years; but now in most countries this was given consideration.

The point was made that sometimes higher education had been thought to promote equity and justice. Some commentators in the West had suggested that this was not so, and that higher education reinforced social stratification. The more general thought was that education had a role to play in changing political structures, and many countries were wondering how to set about using it to change their social systems.

Another speaker thought that education could not hope to over-turn quickly the traditional Asian values as had been implied by Dr. Wu when he said "Traditions are made and can be unmade".

4. Selection Policies

Turning away from these philosophical questions the more practical issue of selection of university entrants was discussed.

Dr. Wu was asked how he could make compatible his suggestions of "equal opportunity" and "meritocracy". In his reply he pointed to the desire of university entrants to get into the "top" university in the country, and suggested that the practical needs of the situation might be better met by admission to provincial universities, perhaps with less prestige, but "of sufficient standard".

Another question posed was whether, in accepting more entrants, their number should be limited by ability as revealed by an entrance test, or whether a more open-door policy should be adopted. There was considerable comment on the well documented fact that candidates from higher social strata and from urban rather than rural environments were more likely to do well in entrance tests. The University of the Philippines statistics were quoted as showing that candidates who achieved entry were drawn from a mere 4-5 per cent of the total population. The chairman gave it as his opinion that in the developing nations of Asia access to higher education is at present not merely limited, but is limited to the privileged classes.

Dr. Wichit offered a series of questions for the consideration of the participants. Does our entrance system provide equal treatment? Do we turn away those who should get in? Is our testing instrument valid? Is it reliable? Then in regard to *when* we select: although we have traditionally made our selection *before* admission, should we delay this? Should we allow all to enter and apply selective graduation? He said that the chance to come in is not the same as the chance of success, provided that standards are maintained. He further noted that some institutions are practising such methods.

A participant put forward the view that there must continue to be entrance examinations, but these entrance examinations must be fair. He made the categorical statement "Education for the masses — yes! Higher education for the masses — no!" At another time in the discussion a very different point of view was put forward by Dr. Swasdi who said "The masses will prevail, whether you like it or not. The masses are pressing. You must be responsive."

5. Creation of Unemployed Graduates

It has been said that there is a terror which haunts educational planners — are they in danger of producing unemployed graduates? But there is also a recognisable danger on the other side. If opportunity of higher education is not given, there may be created a frustrated group of would-be university entrants. It was stated in the discussion that in Asia generally the "waiting time" to obtain employment may be considerable for a university graduate, but it is even longer for a high school graduate. Thus, for the individual, the returns are better if he can obtain university entrance and education. The comment was made that those who control university entry control the national economy, and the possibility follows that they may be in fact defending the exclusiveness of the existing system.

Dr. Wu was questioned about his suggestion that direction of the universities with respect to manpower planning might be done by the Ministry of Education. He elaborated that his suggestion had been made with ASEAN countries in mind.

6. Types of Higher Education

The point was made that higher education might be thought of as being divided into two categories:

a) the universities were élite establishments and were unable to handle the problem of mass education;
b) the technical high schools were more practical institutions with intakes of students increasing faster than the universities.

A participant spoke of the difficulties met in trying to assess the state of higher education in South Korea. Manpower surveys were difficult to make since the word "technician" might be applied to widely different types of occupation. Intervening military service meant that the lead time from leaving school to graduation was seven years, and this made manpower projections difficult. In the experience of the speaker the number of engineering students in Korea per 10,000 population was almost identical with that in Germany.

Another participant claimed that among university students the male/female ratio was almost the same in Pakistan as in Germany. The staff/student ratio (1/12) was better in Pakistan than in Germany (1/15).

7. Adult and Extension Education

Dr. Swasdi said that a university had a two-fold function:

a) to provide high powered education which would qualify graduates for leadership;
b) to respond to the masses.

He considered that these two functions could be fulfilled by the same institution. Within the university there should be a big college of "university education" which would provide the extension education.

Another speaker recommended the use of mass media, but said that mass media were "not enough", and commended the concluding statement of Dr. Situmorang's paper which states that innovations need "an attitudinal change of all personnel concerned".

SECTION 2.2

HIGHER EDUCATION AND SOCIAL-ECONOMIC DEVELOPMENT

Bikas C. Sanyal

Summary

The socio-economic development of the Asian countries, essentially, means the betterment of the conditions of life of the masses. Although development of higher education is apparently correlated with the economic well-being of a country, the rapid growth of higher education in the Asian countries has created as many problems as it has solved. These problems include the irrelevance of the structure, content and methods of instruction of higher education; high social cost mainly due to wastage; alienation of the key production sectors of the economy; mass-exodus from village to cities; unemployment, underemployment and scarcity of manpower due to quantitative mismatch; lack of emphasis on employment creation; increase in unmet expectations, etc. It is understood that for higher education in Asia to be of any use to the masses, it has to be a part of the overall development strategy of the country concerned. This strategy has to give importance to the development of natural, physical and human resources (Agriculture is apparently the main natural resource). Human resources are to be developed so as to exploit the natural resources most effectively. Development of human resources should not only concern production skills but also attitudinal skills which in turn will enable an individual to contribute to national development, which today has to consider not only economic growth, but also distribution of benefits equally among the masses. This needs more than production skills traditionally estimated with manpower forecasting techniques. The paper suggests methods to improve upon the traditional manpower forecasting techniques by considering alternative economic growth rates to tackle economic uncertainties, identifying occupational mobility, changing participation rates among different social groups and by regionalizing the estimates of needs for skills so that the traditional sector which involves the majority of the Asian society is not left out of the forecast of needs for production skills. The paper also suggests methods by which attitudinal skills could be measured and incorporated in the process of integrating higher education with the socio-economic development strategy of a country in qualitative terms which are often ignored in designing such strategies.

EFFECTS OF INTENSE INDUSTRIALIZATION ON HIGHER TECHNICAL EDUCATION AS SEEN IN INDONESIA

Dietrich Herrmann

Summary

The industrialization efforts in Indonesia have been very intensive and have found a good response in industrialized countries due to the politics of an open market.

The necessity to fight unemployment and to keep within the budgetary limits, based on natural resources, has showed up and intensified the great lack of qualified manpower in the high and middle levels of technical education. The market paying well for all technical personnel, there has been a drain of qualified staff from the universities. The educational system cannot react fast enough to fill the gap. Single projects may help in defined situations.

The establishment and growth of new universities must be well coordinated to synchronize education, and the confrontation of advanced technologies with the stable historical and very different culture calls for new identifications and approaches.

The Indonesian Government has been successful in finding new objectives and new organization forms for the higher educational system.

The possibility of extending this system needs first a stabilization of teaching manpower potential, thus fixing the prime factor of quality before quantity.

The achievement of progress demands a modified western technological approach and improvement of the indigenous technology to prevent dependence on imported systems, and ensure an identification with established traditional creativity.

HIGH LEVEL MANPOWER IN AGRICULTURE AND THE CAPACITY PROBLEM IN TURKISH HIGHER EDUCATION

Ediz Ulusoy

Summary

The economic and agricultural situation of Turkey is reviewed.

That section of the population (in 1970) which was engaged in agriculture, forestry, fisheries, etc. was 10 million out of a total economically active population of 15 million. Among the 10 million the illiteracy rate was 59 per cent, while the illiteracy rate for the whole population was 45 per cent, and the proportion achieving access to higher education was only 0.24 per cent, whereas the proportion of the whole population was 1.45 per cent, and the proportion among the highest group (workers in financing, insurance, real estate and business services) was almost 20 per cent. It is seen from these figures that the agricultural worker had a very poor chance of achieving entry to higher education.

Data taken from university entrance figures in 1974-75 show a similar pattern. In that year almost half of the students attempting the university entrance examination came from the capital city of Ankara, and these "city" students were more successful in the examination, obtaining 62 per cent of the available places. In that year the proportion of children of farmers who achieved university entry had gone up to 8 per cent, but this was still the lowest percentage among all workers, and the percentage of children of professional workers who achieved university entry was, as before, the highest and was 22 per cent.

Higher education is almost free in Turkey, and many precautions have been taken to try to ensure that all students will have an equal chance of achieving higher education. But despite this there is still a great disparity, and while the applicants from the highest income bracket have a 30 per cent chance of entering the universities, those from the lowest income bracket have only a 12 per cent chance (average overall figure 16 per cent).

DEMOCRATIZATION OF THAI HIGHER EDUCATION

Wichit Srisa-an

Summary

The development of higher education in Thailand emerged as an elite system in the early years of this century to serve the government's manpower needs. Since World War II, the trend has been for a new form of social demand approach to manifest itself due to steadily increasing rate of population growth and the rising expectations of members of the new generation that they should have a broader access to higher education. Nevertheless the manpower approach was still important.

Two approaches adopted by the government to meet the growing demand for higher education were (1) the *traditional* means which include the expansion of existing academic institutions, setting up new institutions in the regions with special admission quota for local students and promoting the establishment of the private colleges, (2) the *non-traditional* means which include an open-admissions university, an open university using mass media with unlimited enrollment, and the community colleges to serve the communities in providing occupational, terminal programmes to produce middle-level manpower according to the needs of the community.

There still exist problems which include the quality of the teaching staff, resource constraints, graduate unemployment due to surplus of graduates and the mismatch between educational outputs and the world of work. There is also a problem of wastage, which in this paper is discussed in terms of drop-out and late graduation. These are higher in the new non-traditional approaches than in more conventional systems.

It is planned to use the open university approach via mass media to reach a large number of students, and the community college method will be employed to promote to a fuller extent the democratization of higher education in Thailand. The combined manpower and social demand approach emphasizing occupational, terminal and self-employed aspects of education will be continued.

HIGHER EDUCATION IN IRAN

Horst Frischkorn

Summary

Iranian universities and other institutions of higher education have undergone rapid expansion in recent years. During the period from 1962 to 73 the number of university students went up by a factor of about 2.4, that of students of other institutions of higher education went up by a factor of about 23.

This increase has been mainly due to the activation of the country's potential for higher education: new universities have been established in the provinces, a system of grants and fellowships have made higher education available to the poorer strata of society, and more women have found a way to the universities and the other institutions.

It appears that the other institutions of higher education have reacted faster and more realistically to the needs of the country than the universities, which are more conservative.

Figures from the University of Azarabadegan (Tabriz) for students and staff members sent abroad on university fellowships for advanced studies and research, show a strong preference for the United States and Great Britain, with Germany far less favoured.

DISCUSSION

1. Conflict between the University and Society

Dr. Frey challenged the implicit suggestion in Dr. Sanyal's paper that it would be desirable to avoid social pressures. He cited rather the need for social pressures, and quoted the officially sponsored study on "Poverty in India" by Dandekar and Rath which envisages social pressures and their organisation as the only means to increase the problem-solving capacity and speed of the decision making of policymakers. He referred also to the alienating effect of present day education "in both worlds", and warned of the possibility of a revolt against the present day universities and their technocracy.

Another speaker spoke of the large number of aspirants to university education, and said "Does higher education present itself as a threat?"

Mr. Raja Roy Singh pointed out the need to offer cultural, social, and "pure knowledge" education, which he felt had been underemphasized in Dr. Sanyal's paper. In the same vein Dr. Frey remarked that these topics, which did not lend themselves so easily as technocracy to quantification, were liable to trail behind in priority, with the result that the prescription dealt with symptoms rather than with root causes.

2. Manpower Planning

The chairman, Dr. Victor Ordonez, asked, "How are we to link our university output to manpower needs?" One approach to this, offered by another speaker, was to ask "What do students want?" And the speaker answered his own question with the one word "Employment". He likened the universities to factories, which screen their raw material, accept only the very best, and then proceed to turn out their products without ever doing any market research to discover whether the product is saleable or not.

There was a contrary feeling however that the attempts which had been made to forecast the market demands for manpower had often been very wide of the mark. It was recalled that the OECD estimate of manpower needs for Europe had been wrong, and Dr. Sanyal said that manpower estimates in the West had often shown very big gaps between the estimate and the reality. He felt that we should try to find out what made students change jobs, and why they came for higher education in the first place.

It was also pointed out that in our consideration of manpower growth our estimates are usually for only the modern sector of the economy. Thus we discuss manpower in relation to perhaps 10-15 per cent of the population, which would be only about 7-8 per cent of the labour force. How much of the population was outside our calculations?

Mr. Raja Roy Singh asked for a wider view than that which Dr. Sanyal had put forward when he said "by properly planned higher education we mean that the system would generate skills and aptitudes needed for the development and exploitation of the resources"; he asked rather for a broad view of education, and a pattern of education which would be polyvalent.

3. Quantity versus Quality

Dr. Amnuay questioned whether all demands for higher education were

legitimate. He said that as more students clamour for entry, we make more spaces, when perhaps the more proper response would be to question the legitimacy of their demand. His suggestion was that nations (especially in developing areas such as Southeast Asia) should determine their *a priori* national objectives, and use these as guiding lights. By too readily creating more places in the name of democratisation we might just be giving ourselves more problems.

Although quality was difficult to measure, it was felt that quality was often hampered by accelerated growth, and some speakers asked what measures could be taken to safeguard quality. In an overstretched situation there was not enough academic staff; and sometimes there was not enough finance for adequate salaries and even those teachers left the universities. Indonesia had been tackling this problem by increasing salaries. Thailand was consolidating rather than expanding. Both countries (as most other countries in the region) had active programmes for the up-grading of present staff, and Dr. Situmorang was hopeful of this method.

Another speaker made a plea for democratisation "while maintaining quality".

4. Some Suggested Solutions

Regionalisation was one suggestion — not in the political sense, but structural, economic, social, and in relation to human and natural resources.

The private sector could contribute, and in some countries of the region had been doing so for many years. Dr. Ulusoy spoke from his experience in Turkey, where attempts to increase university education by expanding the private universities had led to increased quantity, but poor quality. He felt that if a government could not staff its universities there was little hope in looking to the private sector. Another speaker warned that the private institutions must have just as much integrity as the public institutions. They could participate in and contribute to expansion, but they must not be allowed to proliferate as "diploma mills" making a profit out of education. But with adequate control (and Thailand was cited) they had a contribution to make.

Non-traditional approaches were discussed. Community colleges, and occupationally oriented training were suggested as means which really serve the needs of the population, as they usually provide skills which are direcly productive for the society. Thailand's two experiments were briefly described. The first was the establishment of Ramkhamhaeng University, with no entrance examinations, which offers a wider opportunity to all without restriction. The second is to be an Open University, which is scheduled to start within some three years, and which will teach through the mass media. This offers also a partial solution to the cost of university education; it will broadcast knowledge through existing radio and television stations, and will not have the enormous expense of new buildings. It is hoped through these two types of universities to inculcate entrepreneurial skills, which the graduates will be able to turn to good use in helping their community.

The final plea made in this session was that we should go beyond the limits of the campus in our thinking about the universities, and that we should "recall the community and the country to the university."

CHAPTER 3

HIGHER EDUCATION AND THE NEEDS OF THE MASSES

SECTION 3.1

HIGHER EDUCATION AND THE NEEDS OF THE MASSES – A CASE STUDY

S. Ramani

Summary

This case study illustrates some aspects of the efforts made by the Indian Institute of Technology, Madras, to mobilize higher education with West German collaboration, to serve the needs of the masses.

The descriptions of the various activities have been classified into six categories as follows:

1) Instruction at the undergraduate and postgraduate levels.
2) Research programmes and dissemination of research findings.
3) Industrial liaison and consultancy.
4) Continuing education.
5) Social service and socio-economic planning.
6) Relationship between goals of undergraduate engineering and national goals and priorities.

The paper highlights the contribution made by the Indian Institute of Technology, Madras towards social benefits, national productivity and concern for the needs of the masses. It is hoped that this will serve as a useful model for developing countries.

THE MULTILATERAL FUNCTION OF UNIVERSITIES IN INDONESIA

Joachim Holz

Summary

The universities in Indonesia work in a "Tridharma" system with three aims — teaching, research, and cooperation with the community.

The system has a traditional basis, and its multilateral functions are constantly under review and follow the rapid progress of development and the needs of the country.

At present, great efforts are being made to raise the standard of all universities to similar levels. Simultaneously each unit was asked to concentrate research on a selected speciality. The Universitas Pajajaran in Bandung, West Java, which will b discussed, decided to concentrate on Law and on Environment. The following programmes are given as examples:

1) Consultation activities.
2) Data collection for integration of industries in rural areas.
3) Determination of health indicators in villages.
4) Cooperation between students and villagers to improve local living conditions.
5) Medical services for students, officials of the university and the community.
6) The Indonesian-German joint project of an Institute of Clinical Parasitology, concerned with:
   a. health of plantation-workers.
   b. stimulation of laboratories of medical outposts ("Pus Kes Mas" of the Ministry of Health).
   c. cooperation between the base in Bandung and the people in the rural areas to eradicate diseases of the masses (like Malaria, Helminthiasis, other Parasitoses), included in a referral system.

EDUCATION FOR THE DEVELOPMENT OF HEALTH SERVICES FOR THE RURAL POPULATION IN PARTS OF THAILAND

Frank-Peter Scholp

Summary

The ratio of doctors to population is about 1 to 1,000 in Bangkok, about 1 to 30,000 in the rest of the country, and about 1 to 100,000 in the rural areas when the provincial cities are excluded.

Two means are reported as being used to try to redress this situation and provide some health care for the rural people.

In conjunction with the Ministry of Public Health, the University of Khon Kaen organises a 14-day course for village health volunteers. These volunteers are expected to go back to the countryside and serve their neighbours as unpaid volunteers. They are, however, allowed to make some small income by selling drugs.

In an other approach to the problem Khon Kaen University has revised the medical curriculum, and is now aiming to produce graduates who will be more appropriately trained than in the past to serve the needs of the rural communities. The community training programme in this scheme is sponsored by GTZ. The first graduates will complete their training in 1978, and it is expected that these young gradautes will stay in the North east. Sixty per cent of them originated from that region, and after graduation they are bound to serve the government in that area for two years.

THE IMPACT OF THE MASSES ON HIGHER EDUCATION

Rainer Jerosch

From the topics of the envisaged lectures in this conference it can be observed that great emphasis is placed on the question: what is the impact of higher education on the masses? I should like to contribute a little to the other important question: what is the impact of the masses on higher education? I feel that until today little attention has been given to the fact that there is not only the official curriculum established by institutions of higher learning but also a so-called "hidden curriculum" which largely determines the outcome of higher education. This hidden curriculum is based on value systems, metaphysics, attitudes and convictions of the masses and indirectly contributes largely to idiosyncrasies in form and outcome of education in different nations and cultures.

The importance of this aspect may be illustrated by a few quotations:

In his book "Small is Beautiful", E.F. Schumacher writes:

> "The modern world has been shaped by its metaphysics which has shaped its education, which in turn has brought forth its science and technology".

Dr. Y. Nayudamma, Director General of the Council of Scientific and Industrial Research, New Delhi, went a step further and said at a conference:

> "Development is culture-based and accordingly science is culture-based. Science cannot grow if scientific thinking is not incorporated in human life".

The National Committee on Science and Technology, New Delhi, frankly states in its Approach to the Science and Technology Plan:[1]

> "The religious and social impediments in our society to the deployment of science and technology are long-standing and deep-rooted".

With regard to methods and content, modern higher education all over the world is based on modern science. Modern science, however, is a cultural phenomenon of the western world which has its roots in the intellectual processes of the late European Middle Ages. Nations which participated only marginally, or not at all, in this process, followed their own development till they were suddenly confronted in the colonial era with a readymade system of rational explanation of the world and the universe, and a corresponding set of instruments for mastering and controlling forces of nature.

This event caused a cultural conflict in the beginning of the colonial era, and it is still not a closed chapter of history. One may even venture to state that coming to grips with Western cultural phenomena has really started only in the post-colonial era, when the sovereign Governments of the Third World largely subscribed to the modernisation ideals of the West and proached these to their people as a kind of State Religion. In contrast to this, the former

[1] New Delhi, 1973, p. 3.

colonial powers had tried to prevent the cultural conflict (which had already been called into play through their mere presence) from being fully realized. They were mainly indifferent to indigenous traditions and culture, provided these did not prejudice their political and economic intentions. The reasons for this attitude of the former colonial powers were summarized by Abbé J.A. Dubois 150 years ago with regard to India as follows:

> "... in my humble opinion, the day when the Government attempts to interfere with any of the more important religious and civil usages of the Hindus will be the last of its existence as a political power".

The picture that becomes visible today in the Third World is characterised by a desperate struggle between indigenous cultures with their particular value systems and the foreign body of Western civilisation. Unfortunately, this fact is only rarely understood in Europe, as it was a matter of good form and taste in the post-colonial era to classify Indians, Africans and East Asians respectively as brown, black and yellow Europeans and thus to ascribe to all men more or less uniform European mentality and behaviour. The effort to undo as quickly as possible the discriminations of the colonial past, overshot the mark and stepped unwittingly into an arrogance which surpassed that of the colonial powers.

It is, therefore, often assumed that the adoption of modern scientific and technical knowledge and thought is — as in Western countries exclusively an intellectual process of learning. An adequately high intelligence quotient of the students on the one hand and the availability of competent teaching staff, adequate demonstration material and equipment on the other, is often regarded as sufficient. People were, and still are, largely of the opinion that the deficiencies in science and technology in the Third World can be made good automatically in this relatively simple manner. Here, as in other cases of so-called bottlenecks, it is however indicated to investigate the deeper causes of development and its deficiencies.

The history of the mind teaches us that one essential precondition for the coming into existence of modern science and technology was the process of secularisation. In the course of this process the masses in Western countries became increasingly aware that truth can also be attained independent of divine inspiration and revelation through strict mathematical reasoning. Copernicus and Galilei are known to have prevailed over the cosmic system of the Holy Bible, and their scientific approach has been accepted by the masses. As a natural sequel, scepticism towards dogmas and increasing involvement in a world which had become explicable and calculable, led to attitudes which tended to neglect the care and search for salvation and to seek welfare primarily from the new realisations. This second large step led, towards the end of the 18th century, to the development of applied science and technology in Western Civilization. The forces of nature were identified to be not only explicable and calculable but also objects of manipulation for the sake of increasing welfare. In other words, the world became "makeable". The Westerner has been trying ever since to steer this world in a sovereign manner, a world by the importance of which he is so much taken in that he scarcely pauses to ponder over the significance of his actions.

The participants in this conference from Asian countries are invited to take stock of the situation of the masses in their respective nations under humane aspects and to reflect upon the two questions:

- to what degree do the traditional beliefs, attitudes, metaphysics and value systems of the masses influence students and teachers, and
- to what extent does this "hidden curriculum" conflict with the teaching of methods and the contents of science and technology in higher education.

The German experts are invited to report from their experiences on the "religious and social impediments to the deployment of science and technology" which, for instance, were deplored by the Government of India in the above mentioned Approach to the Science and Technology Plan.

In fact, it could scarcely be a matter of mere coincidence that a culturally highly developed nation like India with such a large potential of manpower and with such a highly challenging nature has so far contributed relatively little in terms of indigenous technology. And it should make everybody pensive when the Chairman of the Atomic Energy Commission of India, Dr. H.N. Sethna, having in mind the long tradition of higher education in India, said:

> "I would not be wrong in saying that sufficient knowledge exists today to solve most of our country's problems ... The application and utilisation of this knowledge, however, call for a new outlook, new value systems, new strategies ..."

In my humble opinion, a frank analysis of the foreign element in higher education, with a view to creating an awareness of the cultural conflict in students and teachers, can help a lot to overcome the unconscious but very real hindrances to the advance and application of science and technology.

I therefore feel that it might be worthwhile to consider introducing lectures into the official curriculum on the roots which science and technology have in a particular historical situation. Pedagogical-didactical questions should be considered as well, for instance, how far indigenous knowledge can serve as a starting point for the presentation of modern science and technology, the question here being mainly, for teacher and students: enculturation or acculturation?

The present and the future call for an active mastering of our world through rational scientific methods and particularly the full application of technology for purposes of development relevance. The cultural conflict should not longer stand in the way of such progress. Creativity cannot be brought about if a person has a split personality — if at home he believes in one truth, and in lecturing he believes in another truth. All attempts to understand the conflict fully and to overcome its retarding effects deserve our special encouragement. In doing so, the fact should not, however, be overlooked that though psychological realities are difficult to seize, they are harder facts than the visible ones.

THE HUMAN SETTLEMENTS PLANNING AND DEVELOPMENT PROGRAMME AT THE ASIAN INSTITUTE OF TECHNOLOGY (A.I.T.)

H. Detlef Kammeier

Summary

The Asian Institute of Technology (A.I.T.) introduced its Human Settlements Planning and Development Programme in 1973. The programme has been growing since then and is planned to be further expanded during the coming five years, with the financial support by the Canadian Government.

The education and research programme is characterised by three main tasks:

1) Educating high quality manpwer for human settlements planning development, management and education.
2) Research in human settlements in the Asian region.
3) Dissemination of information on human settlements.

In its initial phase, though on a modest scale, the programme has already been rather successful, particularly with regard to the first and second task. Courses and workshops taught as well as independent student research projects have been practice-oriented and well adapted to the requirements of Asian countries. The implementation of the third task is under way.

The Human Settlements Programme at A.I.T. should be recognized as one of the regional institutions which could provide services, training and assistance in research on human settlements. As a young field of study at A.I.T., the Human Settlements Programme (as well as the whole Institute) has not been made known sufficiently to the German agencies engaged in appropriate education for development. It is thought that this paper can help fill the information gap.

DISCUSSION

1. Further Information in Answer to Questions

Dr. Ramani's Paper

Although German help is an integral part of the Indian Institute of Technology at Madras, it has taken the form of advice to faculty members from their German counterparts, and the output of the Institute shows little evidence of its German origin.

The IIT Madras is not elitist. It is realistic in finding out what the average citizen wants, and realising that he will be likely to ask sooner or later how his money is being spent. The multiplier effect should be noted: faculty members of other institutions enlarge their experience through IIT Madras.

Technological innovations are kept in mind. Feedback is obtained from students, colleagues and other engineering schools, and curriculum is constantly revised (as often as twice a year). Curriculum development is communicated to other Indian engineering schools, who adapt and adopt it. Social changes and effects are not considered at present, but may be a matter of concern in the future. The national objectives are considered and given appropriate attention.

Dr. Holz' Paper

It has been Indonesia's task to build up its higher education system in its own pattern. One of the things considered desirable is that students should go out and "get their hands dirty". They work with the villagers, and in the process they learn about village life. According to Dr. Holz, the University of Padjadjaran sends 200 students and 50 per cent of its academicians each year to the villages.

When he was asked if there was too much aid, and if perhaps it was too difficult to digest, Dr. Holz replied "No, in my view there is not enough aid."

Dr. Schelp's Paper

The success of the training could be evaluated later by visiting the villages and asking the villagers for their opinion. In general the training was found to be successful if the trainee had already been the "village quack", but unsuccessful if the trainee had no previous experience. The trainees were asked to keep records, and some did, although not all. They did not maintain any organised contact with the faculty after training, but could bring their patients to the faculty, and some did. The 14-day training was very intensive, going on throughout the day and the evening.

2. Identification of the Needs of the Masses

After some time had been spent in asking questions of the speakers, and collecting more information about the projects they had discussed and their service to the masses, Mr. Glimm tried to focus attention on the masses — especially as the recipients of the aid. He asked for a clearer concept of the masses. Who and where are they? Who represents them and can define their needs?

A speaker asked whether we would be competent to speak to the masses or their representative, and questioned whether in schemes where university students go out to the countryside they are more concerned with introducing new materials and technology to the villagers (e.g. electricity), or with introducing new ideas.

Dr. Lischka suggested that the needs of the masses could be listed:

a) basic necessities — food, clothing, shelter, work.
b) communication — social contacts, family, neighbours, friends, games.
c) knowledge — the use of the mind, learning, arts.

and he asked "Does higher education try to supply these needs?"

Dr. Swasdi spoke of the need for caution and patience in assessing the real needs of a rural population, and the possible danger of introducing those innovations which seemed by Western standards to be needed, when the people's concept of their own need was something different.

Returning to the more fundamental and obvious needs Dr. Wagner felt that when needs were considered an obvious one would usually be improved food production. He asked for attention to this in the curriculum, and as a general objective of aid.

3. Cultures and the Transplanting of Technology

Dr. Jerosch's paper was appreciated, and especially in the way it stimulated discussion on the interactions between different cultures and their attitudes to technology. There was some suggestion that imported education inevitably did more than merely provide technology. As one speaker said "If you change the hearts and minds, you change the course of history." Dr. Swasdi urged that European experts should accept the facts of the Asian environment and people. He said "Let us accept that we are different. Do not try to change the masses." Dr. Wu had made the point that "Traditions were made and could be unmade." In this session a technically minded participant pointed out that in terms of physics the charging period and the discharging period take the same amount of time!

Several speakers spoke of the difficulty, or even impossibility of transplanting higher education and technology to foreign soil. It was emphasized that behind Western manifestations of education there was a whole "hidden curriculum" from which the manifestations grew. This made the transfer of technology, which was often desired by governments of developing countries, difficult to a much greater extent than the governments expected. The difficulties might manifest themselves as tensions in the society and in the individual. Sometimes it was thought that difficulties resulted from lack of money or manpower, but it could be seen that even in the oil-rich countries where money was no object these difficulties of the "hidden curriculum" were still present.

Another speaker took up the question of the personal conflict which could be generated when tradition and everyday life were not in tune. His concept was that man is both a rational and an irrational being — and this is just as much in the West as in the East. But in the West a clear division was made

between working time (when we are rational) and leisure time (when we are irrational). On the other hand in the East, and in general in countries where Western technology had not been adopted, this division of daily life had not happened, and the pattern was for work and leisure to be happily mixed and spread throughout the day. This arrangement, he felt, which was inherent in the life style of the East, was not suitable for modern Western technology.

Dr. Jerosch felt that in the main the value systems of Europe were operating there both in leisure hours and in working hours, and the priority was very often given to materialistic values. There was, however, a different value system among the 3-5 per cent of the population of Europe who had received higher education and the remaining 95 per cent.

Returning to the main topic of cultural differences in different parts of the world, it was pointed out that there was a difference between the "masses" of Europe and the "masses" of Asia, both in their numerical size and in the nature of their cultures. It was pointed out that the German universities were the result of German culture, and it was recalled that the concentration of knowledge in the universities in the middle ages was a cultural phenomenon. In Asia on the other hand we had technology transferred from one continent to another with resulting cultural conflict. For example in India the imported ideas violated such traditional Indian ideals as the relationship between pupil and teacher, the esteem of learning for its own sake, and the traditional spiritual content of learning which was now reduced to a screening operation for the selection of competent civil servants.

4. Effects of Monetary Aid on the Universities

There was some discussion about the possibility that aid might be poured into an individual institution tending to make a "showpiece" of it. This prompted participants connected with AIT Bangkok and IIT Madras to defend their institutions with cited examples of how closely related they were to the real life of the country.

Another suggestion of more long-term aid for Asian universities, led to a comment that the German donors were constrained by budgeting restrictions, and could assign money only for one year at a time. It was also suggested at one point that if aid were offered it might be better to allocate the same amount of money over a long period, rather than over a short period, because in the latter case it would leave a very big gap when it was finished.

SECTION 3.2

CHANGING OF CURRICULUM IN PAJAJARAN MEDICAL SCHOOL: A MICRO-IMPLICATION OF "HIGHER EDUCATION AND THE MASSES" IN INDONESIA

Ridad Agoes

Summary

The teachers at Pajajaran Medical School in Bandung have been involved in a major overhaul of their curriculum during the last two years (1975 - 1977), as have teachers in all the other Governmental medical schools in Indonesia. In order to assist this programme of curriculum change and development to take place the Consortium of Medical Sciences (CMS) in Jakarta with the invaluable assistance of the Educational Bureaux has planned and implemented a series of Educational Workshops to assist medical teachers toward fostering a sense of interest in, and enthusiasm for curriculum change and development, from the "hospital oriented" teaching to the "community medicine" teaching concept.

For this purpose the teachers have embarked on the quite massive task of attempting to identify their overall (institutional) objectives, sets of objectives for each of their departments, and sets of instructional objectives. The new objectives shift the concept of "curative", "hospital-centred" medical education to a much wider framework involving preventive care, health education, effective teamwork, and the production of doctors who can help people to help themselves.

The ultimate aims of the new concept are to simplify the curriculum, to expose the students as early in their education as possible to the community health problem by working (in-service training) in the rural health centres periodically, and to increase the output of graduates per year.

MEETING THE DEMANDS OF THAI INDUSTRY AND THE MASSES

Chana Kasipar

Summary

From our experiences we have shown that it is possible to adopt and adapt a German system to suit the needs of a developing country.

The philosophy of a high percentage of practical work in all our courses has proved to be of great value in meeting the needs of Thai industry and our graduates have been found to have the ability and knowhow to start appropriate technologies which are labour intensive, need low investment and use local materials and available resources.

EDUCATION OF BACHELORS AND MASTERS OF TECHNICAL EDUCATION AT THE KING MONGKUT'S INSTITUTE OF TECHNOLOGY

Tom Wyatt

Summary

To meet the needs of industry and the masses the Institute has developed from a Technical Institute offering skilled worker courses to a nationally recognized Institute with university status in a period of 18 years.

The emphasis is on practical work throughout its curricula.

In the part-time Master's course, individual learning methods have been introduced and supported by educational adaptions of scientific management techniques.

RESEARCH IN THE NATURAL SCIENCES IN THE ARAB COUNTRIES WITH SPECIAL REFERENCE TO JORDAN

Basim Raif Bulos

Summary

It is taken as a basic assumption that a vigorous research programme is desirable in a university, the reasons being prestige, attraction of high quality staff and the provision of graduate programmes which help to prevent brain drain. With a vigorous research programme the establishment becomes self-perpetuating.

But this desirable state of affairs has not yet been achieved in the Arab countries, with the possible exception of Egypt. In Jordan the older university, Jordan University, is developing research, but the younger university, Yarmouk University, has been established for only one year. An important influence in promoting research is the Jordan Royal Scientific Society.

The problem of selecting research topics and fields of interest is discussed, and it is acknowledged that some topics are not feasible in small developing universities. Modest programmes making small demands on apparatus are recommended. When support is to be given by a foreign agency, and perhaps expensive equipment provided, it is suggested that the donors should accept the responsibility of making an assessment and deciding whether the best possible use is being made of the funds available. It might be that more and smaller instruments would be preferable to the single large sophisticated piece of apparatus which is often desired for prestige reasons.

In developing countries research is divided into two categories — university research and industrial research, with the former often free and pure while the latter is directed and applied. But in the Arab countries, with little or no industrial research being done, there is a tendency for all research to be performed in the universities and for it to be mainly free and undirected. Thus the research fails to contribute in any effective way to the development of the country. It is suggested that in the absence of industry and industrial research the universities must fulfil both functions and provide both pure research and applied and directed research related to the development needs of the country.

THE DILEMMA OF DEVELOPING-COUNTRY RESEARCH

Dirk Bronger

Summary

Attention is directed to the problems encountered and the causes.

It is suggested that in theoretical research in developing countries we should not be satisfied merely with formulating theoretical statements, but should put these theoretical statements or hypotheses to the test in the developing countries themselves.

In seeking to obtain inter-disciplinary action, rather than the present mono-disciplinary approach, it is suggested that there must be reform at the training stage — that is in the schools and universities, seeking to provide a sufficient number of scientists and teachers of a new type to face the problems of the developing countries.

Because developing country research is conducted often in countries whose culture is alien to the researcher, it is necessary for him to be a unit in an interdisciplinary team, and for this team to prepare itself by developing a basic response to the foreign culture, and then to proceed to an investigation in cooperation with members of the foreign culture.

These conditions are not normally met, and it is enjoined upon disciplines involved in developing country research to cooperate and achieve a consensus on the fundamental questions of the research before they actually begin to work upon it.

DISCUSSION

1. Facilities for Research

With regard to research conducted in the developing country, the German experts were inclined to enumerate the problems associated with this, and to seek means to facilitate obtaining necessary facilities and equipment. Alternatively, they were willing to consider how their chosen field of research related to the situation in the country in which they were working.

Research directed towards the obtaining of a doctoral degree was seen as the desired objective of many candidates in the developing country, and there was discussion as to how this might be directed. When overseas students were to be assisted to go to Germany for the purpose there was need for guidance. Could DAAD provide this? It was thought to be important that the aspirant should have the best possible advice about the topic — its relevance, the expense of continuing it in the home country, its breadth, etc. It was suggested by Dr. Kuhnen that with research costs spiralling, there was need for a research policy to direct it towards development needs; and if funds were then provided in accordance with the development policy, then there could be conflict between the development requirement and the competitive urge of the scientist to seek the expansion of pure knowledge.

2. Research As Staff Training

The value of research training as an educational experience was stressed by Dr. Kuhnen, who pointed out how quickly factual knowledge goes out of date, and urged the need for higher degree candidates to learn to analyse, classify, set priorities, appreciate limitations, make choices, etc. But he also pointed out that there was a dichotomy between training in a discipline and training for a job. Training in a discipline is good for the man who will be a specialist — but not for the labour market, which demands flexibility. He felt that usually two things were needed — knowledge and experience in *two* fields. The second field could very often be management, and he suggested that this would even be good for the man being trained as a university staff member.

Mr. Wyant recommended that staff should be given study projects, and said that one of the hidden advantages of offering Master's degrees was that it could be a means of retaining faculty.

3. Research for Development and Industry

Research could be done in the universities for the small and medium industries which exist in most developing countries. This would be a mutually beneficial arrangement.

Dr. Ramani made the point that the universities should be training not only *job seekers* but also *job makers*. He referred to the idea of management training, and said that in India it had been found that the failure of small enterprises was not usually due to lack of knowledge or lack of finance, but was more often due to lack of management training. He said too that the requirement for a Ph.D. should no longer be the traditional contribution of new knowledge, but in the context of the developing countries it should be possible to grant a Ph.D. for creative development and application of theory. When research was being planned there was need for a balance between pure and applied research — the total technology approach. He commended the selection of "live" problems, concerned with the masses, for M.Sc. and Ph.D. candidatures.

The personal point of view was put forward by a participant who felt that since the university researcher was not there for the money he did need to have the satisfaction of being able to do research; but he also had a responsibility to work for development.

The comment was made that no research was really "pure" in that it was totally free of social consequences. There were only differences in degree of the mix between pure and applied aspects. In deciding on this "product mix" the needs of the masses should be considered.

4. Different Concepts of the University

When an undergraduate school was elevated to a graduate school there was seen to be often a big financial problem, and this was especially so with the private universities. The suggestion was made that groups of universities should lead to a single graduate school.

Dr. Ordonez spoke of the individuality of students, who were not "peas in a pod". He said that neither were the needs of the countries nor the needs of the masses "peas in a pod". They had individuality, and needed individual treatment. He suggested that our response to diverse needs must be to devise diverse types of institutions. Speaking of some of the established universities as the "elephants", he said there was also need for new small universities — the "mice". They would serve different needs, must have different programmes, and must be judged by different standards. But respect must develop between the "elephants" and the "mice". He saw the need for the institutions to reorganize themselves to serve the masses, and for the countries to generate new institutions to serve the masses. Finally, he questioned whether Asian countries should look for new institutional structures as a response to new demands, instead of simply expanding higher education facilities in the old accustomed patterns.

5. Regional Cooperation

Mr. Raja Roy Singh asked Dr. Bulos about what he had said in his paper to the effect that exchange between countries within a region was not a good thing. He felt that it was very sound sense to have such exchanges between countries with similar problems. Dr. Bulos' reply was that he had only a little experience, but in his four years in Jordan he had not found the inter-university contacts to work well. It might be that it was only in that limited context that such plans were not successful.

6. The Needs of the Masses and the Role of the University

Although it was frequently stated in the discussion that the needs of the masses should be identified, there was little attempt to make any precise statement about what needs were likely to be found. One speaker directed attention to community service and especially to family planning. Another made the distinction between *pleasing* the masses and increasing their *welfare*. And a third speaker contrasted the discussion which had been directed often to individual problems, with what he felt would be necessary in the future — the discussion of total problems and total policies.

In general the tacit assumption was there that the university could serve national development and increase prosperity, and this seemed to have been accepted as the means whereby institution of higher learning may serve the masses.

CHAPTER 4

FUNCTIONS OF THE UNIVERSITY

REPORT OF WORKING GROUP A – TEACHING

Chair person: Miss M.E. Schmitz
Rapporteur : Mr. Tom Wyant

The working group decided to present the results of its work in the form of a systems diagram. (Fig 1)

It was considered that institutions for higher education serve the masses through their products and try to provide academic services to the masses to response to their needs. However, these institutions should, in addition to their traditional role, endeavour to broaden the scope of academic activities and provide more practical benefits to society in general.

The concept of feedback, from the results of its services to the masses, needs a more detailed investigation and could be an area for useful further research.

Whether higher education can serve the masses or only affect the masses could not be finally agreed upon.

In regard to the interaction between culture and technology a specific recommendation was made:

Teaching on methods and content of science and technology alone is not sufficient to produce efficient and qualified graduates in Asian developing countries. The cultural conflict created by the introduction of Western thought into the value systems, metaphysics and convictions of Asian cultures must not be overlooked. The National Committee on Science and Technology, New Delhi, has rightly stated with regard to India: "The religious and social impediments in our society to the deployment of science and technology are long-standing and deep-rooted." This applies also to other Asian countries.

It is therefore recommended that lectures on the humane aspects of Western Civilization including particularly an analysis on the roots which science and technology have in a peculiar situation of Western history, should be introduced into the official curriculum in order to promote an awareness of the cultural conflict. Such an awareness is considered as an absolute prerequisite for overcoming the unconscious but very real hindrances to the advance and application of science and technology in developing countries of non-Western culture.

1.0 INPUT

A more democratic system of university admission is desirable. The results of manpower surveys are of doubtful value. Methods to be considered are:

A. Quota system (accepting students who pass an entrance examination).
B. Semi-open admission (no entrance examination but based on past academic results or/and experience).
C. Open admission (no qualifications required). Instruction would be largely media-based.

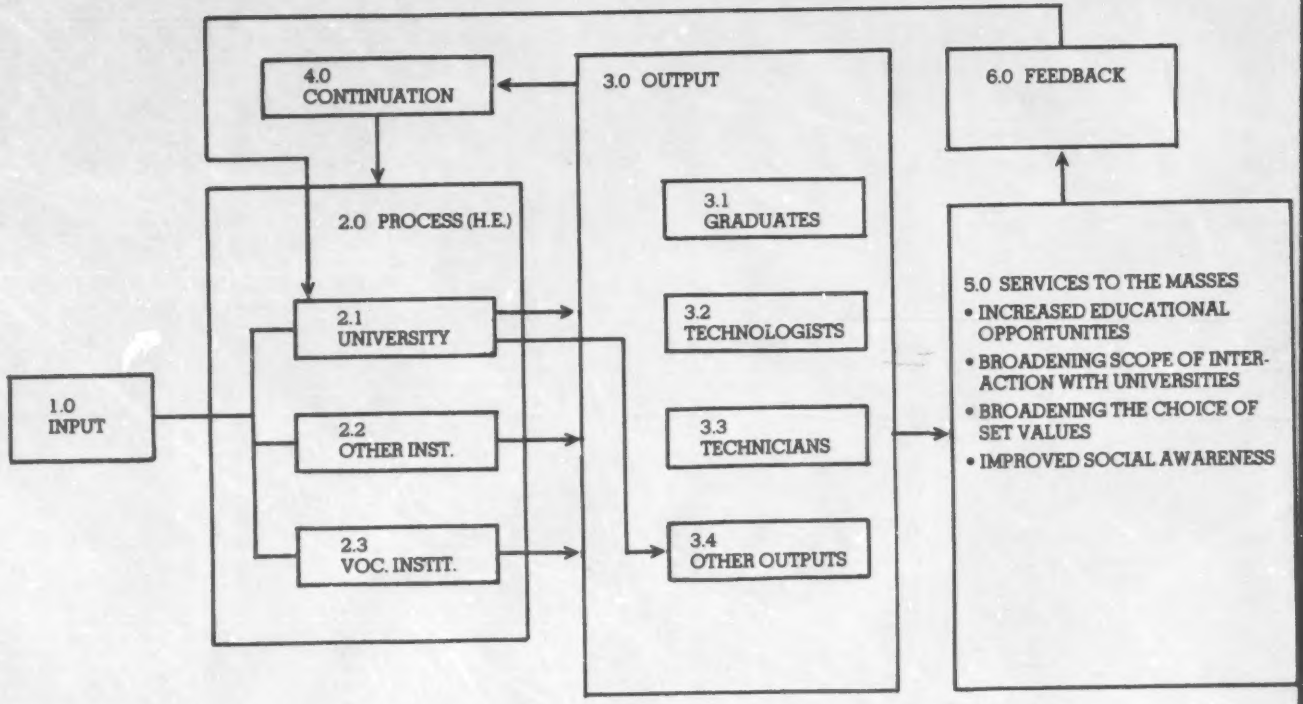

Fig 1.

THE HIGHER EDUCATION SYSTEM
AS SEEN BY WORKING GROUP A.

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D. Up-grading courses.

Factors restricting admission at present in Asia:

a. Admission fees.
b. Government policies.
c. Religious or cultural factors.
d. Family commitments.

2.0 PROCESS

Recommendations

1. Widen scope to meet needs by:
   structurised schemes, variety, length, short-cycle courses, specialisation.
2. Use new approaches to instruction (educational technology, new media, etc.).
3. Apply methods which will improve quality and quantity.
4. Experiment with open/closed organization.

3.4 OTHER OUTPUTS

The twenty five recommendations made by the working group under this head have been grouped according to their function.

a) The recommended modes of presentation of knowledge to conventional students are:

Special short-cycle courses
Certificate courses of various lengths
Up-grading courses
Extra-mural courses
In-service courses and training
After-sales service and support
Advisory boards (see below)
Seminars
Symposiums
Conferences
Workshops
Excursions, field trips, etc.

b) Recommended modes and methods of presentation to non-conventional recipients are:

Publications (books, monographs, etc.)
Exhibitions and open days
Learning-by-appointment centres (see below)
Distance education
Television, radio, casette tapes, etc.
Films
Publication in national media (newspapers, radio, TV, etc.)

c) Recommended areas where up-grading is required are:

Guidance in thesis writing

Improvement of library facilities
Curriculum development

d) Recommended activities directed towards national development are:

Schemes of service to the nation
Research directed towards development projects
Consultancy

Discussion

In reply to a question about the experimentation with open/closed organizations the following answer was given:

Attempts should be made to experiment with less rigid procedures in the administration of graduate courses, for example, the development of a personal curriculum for each individual student is a distinct possibility if present technological facilities are used, i.e. the computer, given a student's qualifications and his learning objectives, could generate a programme of instruction that would be suited to his individual needs.

The rapporteur was asked to comment on two items of the "other outputs" list. These were the Advisory Boards and the Learning by Appointment Centres.

Advisory Boards

In the United Kingdom, technical college departments have boards to guide them on their proposed courses and curricula.

The members of the board are drawn from local universities, education office officials, trade union representatives, local industry personnel managers and other interested institutions.

Learning by Appointment Centres

In the United Kingdom, there are centres, under the control either of a university or technical college, where members of the public, may book by appointment learning sessions in private study carrels using tape-recordings, written programmes, tape-slide or TV facilities. The scheme has been found to be extremely beneficial to busy housewives — who take in a learning session whilst shopping, people learning languages, and students who are having difficulty with keeping up with their studies. It also has the advantage that it can offer learning courses for individuals who cannot join together to form the nucleus of a college course that needs to be economically viable.

REPORT OF WORKING GROUP B – RESEARCH

Chairman : Dr. V.C. Venkatesh
Rapporteurs : Dr. Werner Aufderlandwehr
Dr. H.D. Kammeier

At the outset the group stated the idea that "Higher Education serving the needs of the masses" should mean serving the welfare of the majority of the people. On the other hand, the idea of higher education, including also vocational training, in itself contains a restriction in that it may be serving only a small minority.

It was stated that a general definition of "research for the needs of the masses" is impossible, since the development problems and therefore the needs of the masses tend to vary extremely not only from one country to the next, but also from one region to the next within a given country. Of special importance is the crucial question whether suggested innovations might be at all adapted by the population groups concerned. This calls for intensive feasibility studies of the socio-economic infrastructure before any proper action can be taken.

One of the main constraints felt by researchers is the fact that between their activities and the possible impact on the masses there are always the politicians acting as decision-makers in-between. The result is that research can hardly ever have a *direct* influence on the masses. The politicians usually exert a double control function: (1) by giving the necessary research permissions, and (2) by deciding whether the research suggestions will be put to use at all.

A second constraint on researchers in Asian countries is derived from the fact that normally the timetable of a university member does not allow for long-term absence from teaching. Also the necessary funds are usually not available. Therefore most of the research work is carried out by non-Asian staff providing the money and also impressing their own views as to the selection of research projects, views serving the needs of the masses only as a by-product, their main interest being centered on their own individual scientific career which is a very undesirable state of affairs.

In many developing countries empirical research in remote rural areas should be carried out. That sort of research is mostly not very popular with members of the traditional universities in those countries. There is a widespread fear that results from that sort of research might not be acceptable for publications apart from the fact that such research implies dirty fingers. In order to change attitudes on the appropriate fields of research it will be necessary to instruct future researchers in such a way that they will regard research in those fields and with the above-proclaimed aims as their welcome duty.

After acknowledging these constraints, there are seen to be, nevertheless, a considerable number of academic research programmes that carry great potential in "serving the masses". It is here where research projects are

directly development oriented and by no means to be considered by-products with some development impact.

Among the various individual projects discussed the following random examples of efforts being made at present may be mentioned here (the items listed under different headings are partly overlapping):

- Appropriate technology for integrated rural development (bio-gas; simple electric power generators; appropriate agricultural equipment; aquaculture experiments; drip-irrigation)
- Energy resources (hydrogen use for energy economy; solar energy exploitation; micro-hydropower plants)
- Medicine (health extension services; "barefoot doctors")
- Agriculture (central pool for laboratory equipment in agricultural research; breeding of special strains of sheep)
- Communications (education programmes through a "blackboard" T.V. system)
- Economic and spatial planning (improvement of transport systems; banking and management systems; housing)

Though this kind of research will considerably influence the masses, even here the impact is an indirect one because finally implementation depends on the decision-makers outside the universities. It was strongly felt that such efforts cannot become successful unless they are closely linked to the existing value systems of the masses or, in other words, to the question whether and how far values and attitudes can and/or should be changed. It was found that related studies, e.g. the Harvard studies on technology and values, conspicuously seem to be undertaken in developed countries rather than in underdeveloped ones.

The political implications for research efforts were again stressed, when consideration was given to the question of the setting, planning and coordinating of *targets* and the *assessment of the "needs of the masses"*. More precisely, the respective policy mix with regard to those very well-known basic needs of the masses (food, shelter, employment, etc.) as set up by governments, could be reflected by the research programmes of institutions of higher education. The Indian example was mentioned, where the government has set up its own research institutions because the universities are not responsive enough to the needs of the masses, due to their traditional structure.

The *target groups* are "the masses", of course; that means especially the silent majority whose needs have been neglected too much in the past. Again, this has to be seen under the constraints of the respective political conditions of a given country.

The *implementation* of research work at the existing universities was found to have been hampered by the heavy teaching commitment of university personnel as well as by the great difficulties of smooth cooperation with government agencies in obtaining data. More relevant and more efficient results could be expected if researchers could be exempted from teaching requirements but this would immediately affect the general shortage of teaching personnel and the salary conditions at universities.

In terms of *inputs* (personnel, finance) approaches that have combined foreign as well as domestic expertise were considered to be quite successful and promising. The Kabul partnership or the Asian Institute of Technology may serve as examples. "Partnership" would require that reports be translated (e.g. from German into Farsi) in any case. Funding of research projects may be facilitated by means of contract research in cooperation with private industries.

Perhaps the worst obstacle to qualified and relevant research efforts is the present salary structure at universities. By and large, the salaries are so low that either second-rank people are attracted to work with universities, or a second (better paying) job has to be found leaving not enough time for research at the university. Financial incentives (salary, taxes, privileges, etc.) were found to be of utmost importance to attract suitable personnel.

Regarding evaluation and feedback no consensus could be reached since this seems to be too different from one field of study to another. Perhaps the response from other researchers might be considered as one kind of yardstick for evaluation.

On the assumption that education at all levels should be problem-oriented, the following priorities were thought to meet the requirements best:

i) Innovative approaches such as well-planned partnerships between developed and developing countries (examples: Kabul, AIT) with an emphasis on relevant applied research;
ii) Other forms and fields of educational training such as vocational training and practice-oriented training throughout the schooling system; and
iii) Expansion of existing universities with an emphasis on quality but not on quantity.

REPORT OF WORKING GROUP C
– COMMUNITY SERVICE

Chairman : Prof. Dr. F. Kuhnen
Rapporteur : Dr. Bikas Sanyal

The working group prepared a checklist of existing academic programmes that are likely to be of service directly to the masses. Although only those programmes existing in Asia were to be listed, the group agreed that if any programme existing in the other continents was relevant as a type with the potential to be usefully followed by Asia, then that could also be included in the list. The following is the list of programmes mentioned:

(1) National Service Schemes (India, Iran, Indonesia)
(2) Adult/Continuing Education (in many Asian universities)
(3) Saemaul Movement (South Korea) (a community education movement)
(4) Kwahakwa Movement (South Korea) (a campaign for the popularising of science)
(5) Rural development activities of the Rural Development Centre (IITM, India)
(6) Industrial consultancy activities of the Industrial Consultancy Centre (IITM, India)
(7) Clinic system (Indonesia)
(8) Agricultural extension services (Agric. universities of India)
(9) Information centres (Indonesia)
(10) Out-patient departments of medical faculties
(11) Obligatory rural service for registration as practising doctors (Philippines)
(12) Butsi system (Indonesia) (A study service scheme for university students)
(13) Urban settlement/housing assistance programmes (Philippines)

This list is far from being exhaustive. In fact, one participant mentioned that an inventory of such service activities is under preparation by the International Development Research Centre (IDRC) in Singapore, and could provide us with very useful information on the programmes undertaken by the institutions of higher education in Asia to provide service to the masses. An analysis of the characteristics of the above listed programmes demonstrates that they reach only a very small proportion of the target group — the masses (less than 0.5 per cent of the target group in 8 of the programmes listed). In almost all of them service is offered during the term time and also (on an optional basis) during the vacation time. Teachers' involvement is negligible except where such service is a part of the obligatory training requirement for the students. In all the above programmes personnel other than students and teachers are involved who also receive financial incentive while the students and the teachers provide the service free (personal expenses covered). Very few of the service programmes have been financed by agencies other than the institutions of higher education and the ministries of education.

The group discussed whether only direct service to the masses was to be

considered under the term "community service". Some held the opinion that community service is most likely to be rendered through the two main functions of the university, namely "teaching" and "research" which should be reorganized to respond to the needs of the masses. The traditional universities in Asia due to historical reasons have been alienated from the masses. In these universities "community service" must now be established as one of the goals of their teaching and research programmes. In the newly set up universities and other institutions of higher education community service is to be regarded as a vital function in which both students and staff will work with the masses and for the masses in areas not only inside but outside the domain of teaching and research.

When considering the preconditions for success of programmes designed to serve the masses, it becomes clear that one of the conditions for the success of such programmes is an appropriate political system. Re-ordering of the political priorities so as to emphasize service to the masses seems essential. Service functions of the institutions of higher education have to be an integral part of the national policy oriented towards the masses. Fortunately national policies in Asia are moving in that direction. The service function, again, has to be an integral part of the academic policy and should enjoy parity with the other functions such as teaching and research in respect of financing. The institutions of higher education should provide model programmes through pilot projects (e.g. the Pharani Operation of the University of Mysore) which could then be followed at a national level. These projects should be inter-disciplinary in character with built-in mechanisms for experiments and evaluation with the expertise available in the institutions of higher education. This expertise is generally not available with the government organizations. The institutions of higher education are in a good position to conduct such programmes because of their stability and continuity. The government may change but the institution of higher education does not. This would, however, need a change in the academic policy and attitude among the decision makers, the students and the staff. This includes a change in the reward system for teachers and students. Students should be given credit for their work as a part of their academic programme. Teachers' participation in the service functions should also earn them points for career promotion. One of the existing bottlenecks facing the present system of higher education in developing service programmes for masses is the dominant linkage of institutions of higher education in Asia with the system of industrialized countries and the weak linkage with the country's own needs and problems. This should be checked. Another difficulty is the inability of the masses to articulate their needs.

There are four alternative sources of initiative (for articulating the needs):

(1) people concerned
(2) public administration (government and politicians)
(3) university staff, and
(4) other groups — especially the private sector

In the first case the masses have the problem of articulating their needs where they need expert advice. In the second case, the expert university staff

should be consulted before the public officials take their decisions. In the third case the institutions of higher education should take the initiative and encourage the staff to be innovative and to deal with the problems of masses and, as mentioned before, recognize the service of the staff. It was noted that the government in most cases is receptive to innovative research proposals dealing with the problems of the masses. The institutions of higher education should get involved in research on

(1) identification of the needs of the masses, and
(2) effective means to cater for those needs.

In addition to government sponsored research the other research programmes (Masters and PhD. thesis research) must also deal with the problems and the problem solving of the masses.

It was observed that multidisciplinary units consisting of different faculties of the institution of higher education could be an effective organizational set up for studies on improvement of the conditions of masses if these units could be given the same prestige as other academic units of the IHE. The students and the teachers participating in these units should be given professional credits as in other academic faculties. These units should register cooperation from the different segments of the society, particularly the agents of change of the masses.

It is easier to introduce the service function in new institutions of higher education than in the traditional institutions of higher education. The most effective institutional set up may be, however, those organizations which are established with the sole objective of community service (e.g. Comilla Rural Academy in Bangladesh).

DISCUSSION

Teaching

The discussion opened with questions on the constraints operating in relation to teaching (the topic considered by Group A). One speaker felt that the problem was "50 per cent organization". Another wished to emphasize that the prime need was "to change the attitudes of the masses". Yet another felt that the arousing of "social awareness" was the job of the politician, and within the universities attention should be directed to the study of attitudes and how they might be changed.

With regard to curriculum, a Southeast Asian speaker suggested that the crux of the matter was that curriculum (and teaching) had to change. He saw curriculum development as being of great importance, and urged that Asia should not follow, step by step, all the mistaken pathways trodden by European educationists, but should benefit by their mistakes and "leapfrog" from one good development to the next.

The system shown in the diagram (Fig. 2) was considered, and this led to vigorous discussion. Would it not be of paramount importance to direct attention first to the input to the system — the primary and secondary education? To what extent can a few thousand teachers hope to have an impact of the millions of the masses? Should we not concentrate on the output of "educated products" who would then influence the masses? How does feedback from the masses operate — directly or indirectly? There was no agreement on any of these questions. Some participants felt very strongly that the teaching of the institutions of higher learning should have a *direct*

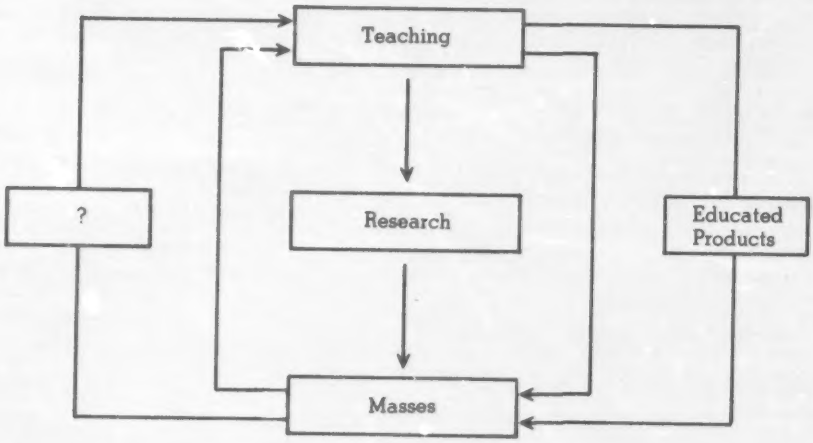

Fig 2.

Influence of the Teaching Activity of Institutes of Higher Learning on the Masses, and Feedback from the Masses to the Institutes.

relationship with the masses, and *vice versa*. Others supported the view that institutions of higher learning should provide training, methodology, value systems, and attitudes, but that the impact on the masses should be made not directly but rather through government and its institutions.

Research

In an introduction to the discussion on research (the topic considered by Group B), Dr. Wichit disagreed that heavy teaching loads prevented university personnel from doing research. He had found that in a situation where 25 per cent of the faculty members did research, this 25 per cent comprised the individuals with the heaviest teaching loads. Emphasizing the need for connnection between the universities and the masses, he said that government agencies should be involved, and he thought that there was "a link missing" between the universities and the government agencies. He visualised research and teaching as "two sides of a coin", and in his discussion the idea was implicit that the two sides of the coin were needed for the benefit of the masses.

But some subsequent speakers brought out the idea that research is something which the masses do not even understand. This provoked the comment "How long do you think they will go on paying for something they don't understand?"

The universities were seen as the places where research should ideally be conducted, and in order to improve the quality of research it was variously suggested that there should be:

a) more linkage and exchange (in both directions) between universities in the developed and the developing countries,
b) "delinkage", which was visualised as being beneficial in that universities in the developing countries could thus be freed from the obligation to strive for international standards, and would be able to devote themselves to the country's problems.

Another suggestion was that supra-national or "regional" institutions should take over more of the research functions.

In the discussion of research the speakers tended to polarised, with the Western participants having as their ideal the typical, well-funded, open-ended research characteristic of the old-established western universities, while the Asian participants put forward sympathetically the typical demand of Asian governments that research should be problem-oriented, and directed towards producing results capable of practical application. This was put rather succintly "How can the farmer maximise one man-power rather than 2 million times as much power in a cyclotron?" Some participants at least shared this view that research should serve the masses at a simple and practical level.

Community Service

When the report on community service (the topic considered by Group C) was discussed, the final paragraph stimulated questioning as to whether the service available to the community from the institutions of higher education

is direct, indirect, or possibly non-existent. Those participants who saw least service activity in existing universities asked whether new types of institutions were not called for — perhaps more regional and more oriented towards integrated training/service. Speakers who were less radically inclined spoke rather of the need to challenge existing institutions, saying "Would you like to do something extra to help the people?" Another idea proposed was that community colleges, with strong direction from community leaders, should be established, having as their main objectives the "improvement of the life of the people".

One theme was common among all the divergent views expressed, and that was that Asian systems should not be *copies* of Western models but should be encouraged to develop indigenously and should be *open* to investigate and respond to indigenous needs.

Even while speaking this way, some participants wished to emphasize those educational functions *other* than community service. One speaker suggested that universities should devote 98 per cent to teaching and research, and should give only 2 per cent of their attention to community service. He saw this 2 per cent as a necessary "laboratory" experience which "would help to keep their feet on the ground". But in his view national development depended on the teaching and research which should have first priority. Countering this, another participant suggested a division of 15 per cent for research and teaching and 85 per cent for service, which should be provided for the nation partly by service to industry and partly by service directly to the masses. There was no wish among the participants to abandon the service function of the institutions of higher education. Even when the allocation was estimated to be as low as 2 per cent the point was made that this was regarded as an absolutely vital 2 per cent. But it did become apparent that many speakers felt there were great differences (which should not be minimised or hidden) between the different types of institution. In respect of direct service to the community this might be best provided by institutions of a "local" type, while institutions which were of a "national" or "international" type might serve the people best by industrial research, staff training, and other more indirect means.

CHAPTER 5

REGIONAL COOPERATION IN HIGHER EDUCATION IN SERVICING THE BASIC NEEDS OF THE MASSES

UNESCO'S ACTIVITIES IN HIGHER EDUCATION IN ASIA

Raja Roy Singh

Summary

The activities of UNESCO can be summarised under three heads — global, regional and national.

Global activities include:

a) the sponsoring of international institutes;
b) the UN University in Tokyo and its associated institutions which concern themselves with global problems;
c) information systems (e.g. UNISIST);
d) joint activities with professional associations, etc.

Regional activities include:

a) the promotion of regional institutions in higher education (e.g. RIHED);
b) the promotion of regional activities such as programmes, meetings, equivalency studies (the Asian study has just been initiated), case studies, special training workshops, etc.

Activities at national level include:

a) projects in institution building (IIT Bombay, and the King Mongkut's Institute of Technology in Thailand are examples);
b) studies of higher education systems;
c) fellowship and study visits.

In conclusion, the speaker sees the future direction to be taken by UNESCO, at least in Asia, as being towards collaboration, so that the strengths of each country's knowledge and experience may be collaboratively exploited for the benefit of all.

ASAIHL'S ROLE IN PROMOTING REGIONAL COOPERATION IN HIGHER EDUCATION

Prachoom Chomchai

Summary

The Association of Southeast Asian Institutions of Higher Learning (ASAIHL) is a voluntary non-governmental association of some fifty full member institutions of Southeast Asia, and about ten associate members from more distant countries. Its purpose is to foster cooperation among member institutions, and this is done by means of seminar programmes, support given to learned societies, dissemination of information, academic exchange and joint projects. More than thirty seminars have been organized, and a number of Southeast Asian learned societies have been launched and now serve the region. Besides producing reports and other information which help academic communication between institutions in the region, ASAIHL sponsors lectures, visits, exchanges and joint research projects. The importance of the place which ASAIHL fills is that it is non-governmental, and provides for free interchange of information between its member institutions and their leadership.

RIHED'S ACTIVITIES IN PROMOTING REGIONAL COOPERATION

S. Nasution

Summary

The creation of an institute of higher education and development was first proposed in a study initiated by UNESCO and the International Association of Universities, and the proposal found favour with the governments of the Southeast Asian countries when their representatives came together to establish the Institute.

RIHED is an autonomous institution, governed by a Board on which participating governments and members of the university community of the region are represented. Its purpose is "to stimulate and facilitate cooperation among the universities and the Governments of the countries in Southeast Asia, and to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole".

RIHED's activities can be summarised as:

a) the publication of essays, research reports, proceedings of conferences and seminars, and "news" relevant to regional cooperation in higher education and development;
b) the sponsoring of research related to development, supporting RIHED's activities; and
c) the stimulation of cooperative research in which the cooperating partners are universities and/or governments.

THE ASIA FOUNDATION

H. Meyer

Summary

The Asia Foundation is a private non-profit organisation incorporated under the laws of California, and having as its purpose the stimulation of balanced economic and social development in Asia. It makes grants to Asian government or private institutions for the implementation of development projects conceived and carried out by Asians. The Foundation has representatives in many of the countries of Asia, and through the offices of these representatives the Foundation's programmes and policies with respect to each country are implemented. It is to be noted that the objectives vary from country to country, but they generally involve education and training.

SEAMEO'S REGIONAL COOPERATION

Tai Yu-Lin

Summary

The Southeast Asian Ministers of Education Organisation was established as a means of promoting cooperative efforts for regional educational development.

Under the aegis of the organization there have been established six regional centres (and a seventh is contemplated):

a) SEAMEO Regional Centre for Tropical Biology (BIOTROP);
b) SEAMEO Regional Centre for Educational Innovation and Technology (INNOTECH);
c) SEAMEO Regional Centre for Education in Science and Mathematics (RECSAM);
d) SEAMEO Regional Language Centre (RELC);
e) SEAMEO Regional Centre for Graduate Study and Research in Agriculture (SEARCA);
f) SEAMEO Regional Project for Tropical Medicine and Public Health (TROPMED) which has a coordinating Board, and a number of national centres.

The activities of these SEAMEO centres consist of training programmes, research and development projects, information and clearing house activities, academic and technical publications, seminars/conferences/workshops, personnel exchanges, consultancy and special services.

THE ASIAN INSTITUTE OF TECHNOLOGY (A.I.T.): A CASE STUDY OF INTERNATIONAL COOPERATION IN HIGHER EDUCATION AND RESEARCH

H. Detlef Kammeier

Summary

The Asian Institute of Technology (A.I.T.), chartered in Thailand and governed by an international Board of Trustees, is a unique educational institution that provides graduate (post bachelor's degree) training in technology and related fields to students from all countries of Asia. From its inception, the Institute stressed the problem-oriented nature of its academic programmes to the end that appropriate solutions may be found for Asian problems of development.

The characteristics which make A.I.T. different from any other graduate schools are: i) its government by an international and independent Board of Trustee; ii) its dependence on funding from a variety of sources in many countries, and the lack of a permanent grant source; iii) its regionally based student body (about 20 countries); iv) its international faculty (about 20 countries); v) its research commitment to relevant Asian problems; and vi) its success in giving high-level training to graduates who, with few exceptions, remain and work in Asia (about 90 per cent).

The Federal Republic of Germany has so far supported the Institute by 48 scholarships (including those from the *Carl Duisberg Gesellschaft*), and by the secondment of one long-term faculty member. The rising German interest is reflected by the commitment for more scholarships and secondments as well as by the election of the German Ambassador to Thailand into the Board of Trustees.

An assessment of the Institute's performance leads to the conclusion that it has been rather successful in its efforts to serve the development of the region. Furthermore, the principle of "exporting" faculty to such a regional institution seems to be superior to the conventional approach of "importing" students from developing countries for higher education to Germany or other developed countries. At the Asian Institute of Technology, there are great opportunities to increase the contribution of the Federal Republic of Germany, thus strengthening her efforts towards relevant higher education in Asia in an efficient and meaningful way.

DISCUSSION

1. The Necessity of a Political Base for Regional Cooperation

Dr. Küper opened the discussion with the comment that regional cooperation is a wide theme, and he doubted whether the meeting had the necessary factual background to discuss it. His view was that in most parts of the world regional cooperation was not possible unless there was pre-existing some regional *political* cooperation.

Mr. Raja Roy Singh took the opposite view and thought that while regional cooperation was something which we must necessarily find, it did not depend on political agreement as a prerequisite.

Dr. Swasdi agreed with Dr. Küper, and referred to ASEAN which he said was highly political. Under the political umbrella the economic cooperation and other forms of cooperation could grow. He suggested that ASEAN was in some ways modelled on the pattern set by the Federal Republic of Germany.

Mr. Glimm pointed out that with ASEAN, as with SEAMEO, the basis of the cooperation is not that cooperation is seen as a value in itself, but rather that cooperation is in the national interest. By this token politics was necessarily involved.

2. Some of the Problems of Regional Cooperation

Mr. Raja Roy Singh said that in his expression the best results were obtained from regional cooperation when it was linked to cooperation within the nation. It did not make much difference whether the regional cooperation preceded or followed the national cooperation, but either way was better than having regional cooperation in isolation.

Dr. Frey spoke of the need to open up societies which were still nation building, and which to some extent thrived on having outside enemies. This generated an inward looking attitude, which it would be desirable to open up.

Both Mr. Singh and Dr. Swasdi were committed to the idea of cooperation. Mr. Singh said that the primeval state was inward looking, and cooperation was the development which had to be cultivated. Dr. Swasdi said that it was an attribute of man to get together and cooperate, sharing his interest with others.

On the difficulties experienced by his organization, Dr. Swasdi said that regional cooperation is hard. It must grow from the grassroots of mutual interest. It has to come by itself, and cannot be donated by an outsider. He noted too that any programme which is truly regional has no strong power base. If it puts its limited resources into structural development, it may experience difficulty with maintenance later — especially if the problem changes. His view was that ASEAN would become problem-oriented, and his secretariat was now preparing a policy guideline, with two constraints:

a) it should create mutual benefit,
b) it must benefit people at large.

Making particular reference to RIHED, Dr. Banphot noted also the political changes which had happened in the Southeast Asian region since RIHED was founded, by which the number of cooperating countries had been reduced.

There were political factors in addition to that just mentioned which limited the extent of regional cooperation. Dr. Nasution noted that education was "an agent to change people". As such the implication would be that it would be carefully watched by the politicians.

3. Does Regional Cooperation Benefit the Masses?

Dr. Frey asked the representatives of the regional organizations how they applied the necessary safeguards:

a) How did they ensure that the knowledge which they disseminated went beyond the immediate participants in their meetings?
b) How did they provide aftercare, to ensure that their organization became widely known?

Only the first question was answered. Mr. Raja Roy Singh implied that it was not known how far the knowledge went after dissemination by the regional organisation. He quoted the biblical reference of the sower — human affairs were like this, and the seed was sown without knowledge of how much would fall on suitable ground and grow well. Dr. Nasution confirmed this view from his experience in RIHED. He was concerned with conferences which had to be regarded as meeting places of minds. The influence of such meetings goes through the minds of people and as such is difficult to estimate, either on the people directly concerned or the people whom it reaches indirectly. Dr. Banphot also spoke of RIHED, and commented that the indirect influence was the more difficult to measure since it took place over a period of time.

Dr. Swasdi spoke of the opposed political systems of Southeast Asia. Against the threats of this opposition the ASEAN countries had begun to look more to the masses. The momentum had shifted towards the masses, and he asked how we could develop higher education to have a feeling for the masses?

In answer to a question, Mrs. Tai made the point that the SEAMEO centres were *regional*, but the programmes and activities were specially designed to meet local and specific needs. Thus the students who worked at the RELC worked on problems which were specific to their own home country and had always a distinctly *national* bias.

4. Centralisation of Higher Education

After Dr. Kammeier's paper on the Asian Institute of Technology (A.I.T.) some questions were directed to him. When he was asked about the curriculum, he said that the emphasis was on appropriate technology. In making any decision the faculty always think first whether the proposed action is applicable to the region.

Dr. Frey asked whether metropolitan universities could develop into post-graduate institutions. And if so, whether A.I.T. could serve as a model. He had in mind a hierarchy of institutions — local, metropolitan and regional (not as equal partners). Dr. Kammeier was in favour of this. Dr. Frey then went on to talk of the metropolitan universities. He considered that in their present form they could not serve the masses, but perhaps they might pursue the other function, and following the A.I.T. model become specialized regional post-graduate centres.

CHAPTER 6

CONCLUSIONS FOR GERMAN-ASIAN UNIVERSITY COOPERATION

SECTION 6.1

HELPING TO CREATE AND KEEP QUALIFIED ACADEMIC STAFF IN UNIVERSITIES OF DEVELOPING COUNTRIES

Hans Wolfgang Riesenkönig

Summary

The universities in Southeast Asian countries could significantly improve their role as promoters of social and economic development if foreign aid could be more concentrated on the training of qualified academic teachers and on the sponsoring of professorial chairs to keep them employed in tertiary education in their own countries. An academic teacher should be considered to be qualified for his job if he has been guided to research and/or applications in his field of specialization and to an appropriate didactic method for nurturing a critical, analytical and creative attitude in his students.

In-service training of young faculty members under the guidance of guest professors from abroad is suggested as the most efficient way, whereas scholarships for studying abroad are more expensive and foster the brain drain. Foreign agencies which sponsor guest professors should combine in-service teacher training with a complementary contract with the host university and/or an additional sponsorship for the selected candidates.

The sponsorship could be granted under the commitment that the candidate continues for a certain minimum time at the university. Additionally, he should have the opportunity of obtaining a professorial chair sponsored from abroad which would guarantee him an adequate income, at least competitive with salaries offered in non-educational sectors of his country. His teaching load should be limited so that he could use a part of his time for research and/or applications which would keep him up-to-date in his field of specialization.

SOME REMARKS CONCERNING THE INTEGRATION OF AN ISOLATED EXPERT AND HIS POSSIBILITY OF INFLUENCE WITHIN THE FIELD BETWEEN THE TWO PARTNERS

Dietrich Herrmann

Summary

The execution of cooperative projects is based on articles of an agreement between the two partner countries. To achieve success in the cooperation these formal tenets have to be handled dynamically.

The space to do so might be described as the non-rational level of a project, in contrast to the rational facts of a contract.

The isolated expert, put into an existing institution and society, has to operate within the new cultural, social and mental background with many external restrictions. His flexibility must be much higher than in his own society. He has to integrate himself without losing his own cultural social identity, and he thus puts himself into a field of tensions between two cultures with their typical and different ways of acting.

To bring one's influence to bear it is necessary to get really close to the daily problems of the partner, and to exert strong self-control to be able to convince.

THE HISTORY AND SOME EVALUATION OF THE KABUL UNIVERSITY PARTNERSHIP IN RESPECT OF THE FACULTY OF ECONOMICS

Werner Aufderlandwehr

Summary

The paper attempts to give a survey of ten years of partnership between a young Third World university and three established German universities. Problems and achievements are analysed.

It is found that the Faculty of Economics has been developed to full strength and is capable of performing all duties requested, especially the teaching of a full syllabus. It is suggested that international standards have not yet been achieved. The research which was originally planned has not yet been completed.

The conclusions drawn are:

a) that the Kabul partnership is in many ways a unique and complex instrument of university cooperation;
b) that at least some of the difficulties and problems encountered had their roots in the socio-economic background of the partners rather than in the actual partnership agreements; and
c) that evaluation of cultural activities in Third World countries should be preceded by an attempt to understand thoroughly the partners' expectations, including both the openly declared expectations and also the underlying and less obvious ones.

DISCUSSION

Methods and Their Difficulties

The discussion first centred on the methods by which German co-operation could best be organised to help developing countries. One of the points made by Dr. Reisenkönig had been that "help should be concentrated in the remote areas, even if their academic level is still inferior to that of others in the privileged centres". It was generally felt that this would be difficult, as German experts were often reluctant to go to remote areas.

There was a rather general view that the establishment of professorial chairs would be useful, for it would free able Asian academics from the necessity of part-time non-professorial work to support themselves. A difficulty which some participants saw was that such endowment of chairs would interfere with the established salary structures. Nevertheless the prevalent feeling was that the establishment of such chairs should be recommended.

Turning again to the work of the German experts, it was suggested by one speaker that in at least some cases the research work undertaken by these experts in the Asian country had not in the end served that country's needs. And even where the research could be shown to serve the national needs, it could not be said to directly "serve the masses". The participant who took this point further spoke from the Asian point of view, and clearly saw research as being properly directed to national needs. He called on university research workers to group themselves, and discipline themselves to undertake contractual research — thinking of the university as being an industry, and not merely an antique "valuable but useless".

SECTION 6.2

HIGHER EDUCATION AND THE MASSES IMPACT ON OBJECTIVES AND INSTRUMENTS OF INTERNATIONAL COOPERATION WITH INSTITUTIONS OF HIGHER EDUCATION IN ASIA

Wolfgang Armbruster

Introductory Remarks

The purpose of this mid-conference statement is to present some views on how to cooperate with universities in Asia in the light of the deliberations of the first week of the conference. It will be related to the objectives of the cooperation as well as to the instruments.

1. How the Conference Responded to the Call for Service to the Masses

This appraisal of the sessions behind us will be biased in several ways: first, because the author was a member of only one of the working groups and therefore knows more about its topics than the other ones; and second, because he is neither a university teacher, nor an Asian, nor living in the region.

The reports from the working groups show how manifold the aspects are under which our general topic can be considered and how closely they are intertwined.

It was to be expected that a systematic review of all aspects was impossible. On the other hand, perhaps it would have been beneficial if the underlying strategies of development could have been clarified.

2. The Masses in Strategies of Development

Nearly all statements were based on a certain idea of the adequate development strategy. For the purposes of this statement I will group existing strategies very roughly into three categories. The grouping is done mainly to elaborate a little on the role of the masses in these strategies.

A. *Strategies of Radical Change.* These strategies are based on the idea that the peripheral role of third world countries in world economy retained from colonial times can be overcome only by a complete disassociation from the developed countries in respect of trade, investment, and development assistance. Internally governments would have to introduce basic needs strategies based on self-reliance and to abandon the present concept of modernization by industrialization for the benefit of the consumptive demand of the upper strata of society.

For education this probably would mean a reduction of universities to the bare minimum of research and output of professionals needed under the new strategy, and putting all the rest together in one system of education on the local level, closely mixing work and study, eliminating dropouts from primary education and making it universal as a basic human right.

B. *Strategies of Modernization.* These are based on the idea that development means a thorough modernization, which is normally taken to

mean rapid industrialization, and introduction of western type technology, and social, educational and political institutions. Agents of development are those strata of the society who can most easily adjust to this process and/or are within its geographical reach. The others are thought to profit from the spillover in the course of time (theories of dual development, of development poles, etc.)

Educational policy under this concept stresses the expansion of secondary, technical and higher education, the rapid quantitative expansion showing the speed of adjustment of the urban middle class to it. That is why it is not true to say, as in working group report C, that universities do not care for the needs of the country. They serve the needs of those who can make themselves heard through government policy or through the power of spending in the case of private education.

This strategy is the prevailing one today in developing countries as well as in donors' policies.

C. *Integrated Strategies.* Recently more of the policymakers have come to notice what scientists like Myrdal and many others wrote long ago. It is that not only does the spillover effect takes a long time to operate, but also that a large proportion of the population in the third world countries is impoverished in absolute terms, and the polarisation is increasing not only between developed and developing countries but also within developing countries. A high real growth rate of GNP normally means that at least a minority in a country is getting less. A low positive growth rate will render the majority of the population poorer and poorer under prevailing patterns of distribution.

This has given rise to employment programmes and lately has developed into a sort of integrated strategy as expressed, e.g., in the ECOSOC document on an integrated approach to the analysis and planning of development. It seems to be underlying to a large extent the policy of the multilateral agencies and some of the smaller bilateral donors. The main features are the application of a selective policy of industrialization with a view to labour intensive technology and export orientation instead of import substitution for production of consumer goods, the shift of a large proportion of the total investments to the rural sector and therein to programmes for small farmers production cooperatives, social infrastructure and so on. A more equal distribution of wealth is no longer regarded as being detrimental for economic growth. In general the basic needs strategy is partly adopted but with the ultimate aim of integrating all the population in the modern sector and the whole country in the world markets.

Regarding educational policy this means a concentration on expansion of basic education without dropouts up to at least six or seven years of schooling. In higher education emphasis will be on consolidation, making contents more meaningful and on research directly related to local problems in all sectors. The idea that higher education should serve the masses is derived from such an integrated approach. It is within a general line of intention not to change institutions basically but to direct their activities to new target groups.

Not all participants in the conference, of course, based their contributions on this approach. The modernization strategy gave the background for most of those who are not social scientists or who are not too familiar with the international discussion on strategies of development. But I heard at least one voice stressing the point that anything really beneficial to the masses must be subversive towards present social structure and ruling élites, and that the present institutions of higher education are unable to serve the masses.

3. Universities as Agents towards an Integrated Strategy.

As to be expected from their origins, institutions of higher eudcation are part of the modernization process, their staff and students coming out of the modern sector, teaching for functions in the modern sector, and doing research on its problems. So far even the services are normally directed towards the modern sector (industrial consultancy, further education, and extension services).

Direct service to the masses shows us the increasing awareness of the academics of the deficiencies of the present situation and is meant to be their contribution towards the integrated approach.

The examples of services to the masses can now be interpreted, not in terms of being either direct or indirect, or immediate or intermediate, but in terms of contributing to the basic needs component of the integrated approach and of counteracting the polarisation of the societies. These examples still are very limited in scope or involve the universities only marginally, e.g. national service schemes. But being a by-product they are a vital by-product as one speaker put it, if they are regarded as the first outcomes in adopting the new strategy.

The main links of universities with the masses have great importance in this view. They can be grouped as follows:

A. *Programmes involving especially Students in Grassroots Approaches.*

Their main benefit may not be for the masses, as many practical problems arise and the masses may not be in a position to digest what they are given. But it really can help to influence the students' aspirations to serve the masses later, whether directly as teachers or medical doctors, or by their attitudes as managers, etc.

B. *Applied Research.* Being the largest pools of brains in developing countries the universities are the main resource for any type of service based on scientific knowledge or requiring continuous accompanying research. The resources of the universities can be directed to such problems as well as the traditional ones. I would like to point once more to the greater responsibility of universities in developing countries because there are still so few specialized organizations to deal with all the problems in between scientific research and the improved quality of life of the individuals at the bottom of the society.

C. *Community Services.* If governments fail to establish necessary services, universities should step in with pilot programmes to induce government

action. One serious constraint should not be overlooked. The universities alone cannot go much farther than government policies and public opinion permit. Tight as budgets are, not much can be set aside to finance community services.

The importance of these exercises is that they contribute their feedback to the academic activities of the universities.

4. Consequences for Bilateral Cooperation.

German cooperation with universities in developing countries so far has followed the modernization approach, otherwise there would have been very little cooperation, as the universities themselves followed this pattern. We also felt quite satisfied in supporting universities to strengthen their teaching and research.

More recently we have come to stress the point of service to the society in general. Service to the masses so far has not been a decisive criterion for the selection and designing of projects. We appreciate projects including consultancy services for the following reasons:

a) there should be a feedback on the content and style of teaching making it more meaningful;
b) consultancy provides relevant topics for applied research which in turn serves as a basis for consultancy;
c) consultancy creates income to add to the normally insufficient budgets for consumables and maintenance, and to add to the low salaries of the staff who might then be able to give up second jobs which have kept them away from their universities.

Reviewing what has been said so far I would arrive at the following conclusions which are strictly my personal views.

4.1 Universities at the undergraduate level are far too numerous to be assisted individually in view of limited funds. They can benefit only via the recruitment of staff trained in postgraduate programmes at universities providing postgraduate training.
4.2 The focus on "institution building" can be retained. Its main target is support for building up postgraduate training with curriculum development and provision of research equipment and advice as components.
4.3 Concerning salary structure and other financial constraints it is necessary to assess carefully, and in advance, the resulting increase of running costs, and to be selective with regard to the field and scope of activity.
4.4 One should concentrate on academic fields and/or institutions which are promising with regard to applied research and consultancy in general.
4.5 One should make some effort to find projects in fields and institutions promising to render service to the masses in the sense defined above. Selection has to recognize whether appropriate structures and motivation are there. This probably will lead away from engineering which has been our favourite subject so far.

4.6 Cooperation to solve problems, in addition to institution building, should be offered. In setting targets, assessing needs, and designing organisational models for teaching and service, meaningful cooperation between German and Asian scholars and institutions seems possible. This tool could be applied even in assisting provincial universities where constraints from the German situation might prevent us from assisting directly.

5. Which tools are appropriate?

Having now solved the more philosophical problems there remain the more real questions concerning cooperation schemes. Whatever the objectives of cooperation are, one is left with the same few instruments to be applied. The main instruments are staff, equipment and scholarships.

5.1 Concerning staff the question arises as to what the role of a few dozen German staff members can be in a region with countless institutions of higher eucation and a surplus of manpower at all levels of qualification. In universities people with advanced degrees are scarce and even people with pass degrees are not plentiful as can be seen from the heavy teaching load. Some reasons mentioned are low salaries and the need for multiple jobs. But can this be overcome by the temporary presence of German staff?

5.2 Equipment, no doubt, is always welcome. But there seem to be serious problems with continuing costs for maintenance and consumables. Service contracts are said to be often too costly for the universities. Technicians who know how to maintain complicated scientific equipment cannot be kept in universities at the pay offered to them.

5.3 Scholarships nowadays are mainly given for postgraduate studies abroad, often to get a Ph.D. This may lead to inappropriate research topics. Here one could think of a sandwich system of thesis work in the home country and overseas, e.g. sample collection in Asia and analysis in Germany, oral examination probably including foreign examiners in the home university with a local degree awarded. Is this regarded as worthwhile and is it feasible? I see two obstacles: a) universities may have too few staff with Ph.D. to supervise such degrees; and b) when only one donor of scholarships introduces such a scheme, better candidates will still go abroad.

5.4 There also seems to be a need to investigate certain problems on a cooperative basis without any long-term assignments of staff. Examples in educational planning or in assessing the needs of the masses in certain fields have been given. This can be done under a joint programme of any university and the German Research Society (DFG). Under this scheme a joint research proposal would have to be presented to the DFG and when approved the German costs would be paid by the DFG while the specific costs of the Asian participants could be met by the funds provided by the Ministry. This could develop into a viable instrument as it seems there are enough scientists to carry out established programmes, but they sometimes find it difficult to get things started. Cooperation with scientists who are experienced in tackling similar problems might be helpful.

GENERAL COMMENTS

Wolfgang Küper

In the following comments I will be somewhat preoccupied with our German administration.

I will confine myself to eight points — which are made in random sequence.

1. After the very fundamental paper of Dr. Armbruster I think we have quite a good framework for at least one of the main aspects of our discussions: development. Let me ask again: How do governments in this part of the world respond to the increasing pressures of the masses on higher education? What are the present facts and government policies in the field of higher education?

   In this respect I may quote from the study of the International Council for Educational Development "Higher Education and Social Change" (see page 79 of the DSE-reader "University, Science and Development in Asia", Vol. I):

   > The Asian Regional Report (UNESCO) in this study proposes that the answer, especially in Southeast Asia, is mass access to higher education, that is, postsecondary institutions should not be more selective but should open their doors wider. For developing countries that have satisfactory growth rates, argues the Asian Report, "the more trained people there are, the better the prospects of developing the society (not just the economy)". The Asian Report maintains that "in the economic development of those nations which today are considered advanced ... the highest payoff ... has been investment in education ... Modern society needs all the manpower it can get".

   Technical cooperation has to be, of course, related to the policies of the partner governments. The German development policy concept seems not to be consistent with this broad approach towards higher education in Southeast Asia. On the other hand, I think we may warn anybody according to our own experiences in Germany against adopting expansion in higher education without a very strict exercise in manpower development.

   Even if the German development policy concept may not be very fond of big quantitative expansion in higher education in this region, German cooperation, as Dr. Armbruster has shown, can come in. It has to be mentioned, however, that there is a kind of tendency in our development offices in Germany to stress direct productive projects, e.g. in agricultural and industry, because these contribute more directly towards development; and education and other social and infrastructural measures are considered as rather unproductive and ineffective in too long periods. Arguments have to be found, in this situation, to convince administrators and policymakers of the fundamental contribution of the social sector towards development.

2. Cooperation in higher education has a quantitative and qualitative aspect. We have concentrated during this conference on the qualitative aspect. Quality in high education, however, has not been clearly defined. We have to find clear criteria for this in order to select, carry out and evaluate our measures. Dr. Armbruster has elaborated on this, but I think more has to be done. I do call upon the working groups to develop this kind of criteria, mainly to select proper projects of quality and standard which will really give service to the community.

3. In my initial statement I said that the scope of our activities in Asia is going back. It is my feeling after the discussion so far, that this situation cannot be derived from the existing conditions in the region and consequently is not properly justified if you consider the structure and abilities of the institutions of higher learning as well as the many problems which could be solved or at least eased by these institutions. There are already some signs that more projects and expert visits are starting, e.g. in Indonesia, where higher education is a major field of Indonesian-German cooperation. More contributions, however, I feel, will be endowed (at a time when the focus of German government development programmes is switching over to the Mediterranean and Africa, and when funds are diminishing) if good projects and good reasons are to be found. This again argues the necessity and possibility of higher education serving the needs of the masses.

4. With regard to the tensions Dr. Herrmann has mentioned — political, financial, cultural, and the differences between project agreements and project realities — I think, there is only one way out: better pre-planning and better pre-understanding between the partners and even better structuring of the cooperation in terms of agreements.

   Better planning seems to be obvious: detailed outlines of the aims, means, instruments, inputs and expected outputs of the cooperation, of course, on the basis of proper pre-evaluation and feasibility studies, more and more elaborated by both partners. Better preunderstanding in terms of agreements can shorten the distance between the partners. Normally agreements on bilateral cooperation are concluded between the governments, the executing agencies/partners sometimes not even knowing about the terms of these agreements. Therefore our agency has proposed to our Ministry that government agreements which seem to be necessary should be held in very broad terms, and on the executing level there should be proper working agreements between the direct partners in the implementation of the project.

5. Better planning is also very necessary for the measurement or better evaluation of progress and results within the cooperation. The aims and objectives have to be clearly defined, the expected outputs have to be well described in order to have a proper reference system for assessing results. There is here, I feel, much work to be done to develop proper evaluation procedures — for the benefit of both partners and the proper usage of scarce funds.

6. In my introductory paper I mentioned the difficulties we have in engaging long-term personnel in higher education in Germany. I would like to ask the working groups to consider either the possibility of improving the recruitment of staff in Germany or alternative concepts of cooperation. Within this context, I think, it has to be considered that with developing institutions of higher learning in Asia and their growing quality there is more need of experienced and high-ranking academic personnel from outside.

7. The need for transfer of appropriate technologies between the developed and the developing, but equally between the developing countries, becomes more and more apparent if we consider higher education as a community service. Our agency has put quite an emphasis on this very important field. May I direct your attention towards a folder we have edited on this topic which describes the range of activities of our agency in this field and the duties of a special department which has been established in order to coordinate activities in this field.

8. Last, but not least, be assured that we are trying to do our very best that our experts do not become too lonely as Dr. Herrmann has suggested in his paper, or even lost. Our agency is a very young one — even compared with RIHED, our host here. But I think we will accomplish our task in due time.

CLARIFICATION GIVEN ON AND SOUGHT BY DAAD

Marga E. Schmitz

In addition to the statement of Dr. Armbruster and the comments given by Dr. Küper, the DAAD would like to clarify a few view points which up to now are not quite clear to us.

At the same time, Mr. Reiser and I had the impression that the function of the DAAD and the possibilities for the DAAD according to its structure and set tasks are not quite clear to every one in the conference.

The DAAD is a university organization and our activities are strictly limited to the university. We are an autonomous organization and want to *sponsor* collaboration which might not be sponsored by governments yet.

We have been informed that the universities in Asian countries have to find different ways, by different instruments to give access to different sectors of the masses, to introduce different courses and last, but not least, to carry out development oriented research.

We do hope that, in the course of the coming discussion, we will have more detailed information of what *this* group would think out of *their* experience, could be done in future.

We do not see ourselves as a donor agency but we would like, in cooperation with you, to find out what you think and to discover how the instruments of our organization can be made use of.

May we just have from you some more clarification on the following questions:

- What is your opinion about support for or collaboration with local universities versus metropolitan universities? An example may be given to explain this question. The Indonesian Government has asked the Government of the Federal Republic of Germany to support only the so-called "feeder universities" since academic staff from feeder universities will have a more multiplying effect than others.
- What is *your* opinion about the support of development oriented research only? Does it imply that basic research would be no longer in the interest of Asian universities since only development oriented research serves the masses? Is international exchange of experience and collaboration in research no longer necessary since it does not solve the problems of the masses? Does not the allocation of development oriented research to the university in the developing countries and the allocation of basic and sophisticated research to the universities in the industrialized countries lead to two classes of scientists?
- Which instrument will serve the masses?
  - fellowship and training abroad.
  - training on the spot or training in the region, being carried out in collaboration with German staff members at Asian universities.
  - How could these instruments be used more effectively?
  - Do you see other instruments through the medium of "exchange of personnel"?

DISCUSSION

Quantity versus Quality

One of the German participants disagreed with the UNESCO report which had been quoted by Dr. Küper. Whereas the report proposed a wider opening of the doors to education, the speaker felt that such open-door policies could already be seen in some Asian countries to be producing unsatisfactory results. He suggested that what is needed is a well-structured education plan, where "quantity is matched to demand".

Applied versus Basic Research

Again the question came up for discussion — whether the masses were best served by the *direct* effects of applied projects, or by the *indirect* effects of more basic improvements in higher education. Participants were found to support both alternatives, while others favoured an intermediate "integrated" approach. It was suggested that for foreign "guest" educators there was a dilemma posed by the nature of education for development. It was suggested that any education for development must, by its very nature, be also subversive because it tended to destroy the old methods of production and to open up the way for criticism of the old political concepts. Thus, despite the fact that foreign experts might feel themselves to be apolitical they would always find themselves, in spite of themselves, being agents of change in more areas than just the apolitical technology which they intended to offer.

Dr. Armbruster referred to Dr. Küper's paper (section 1), and in expansion of what had been said there he gave it as his belief that "serving the masses does not mean turning to agriculture and leaving out higher education". Aid to agriculture, in his view, was too often determined by a misunderstood "modernisation" process and thus, although increasing agricultural productivity and the GNP, has failed to improve living conditions of the rural poor. The universities, on their part, should undertake serious efforts in helping to establish an integrated strategy for rural (including agricultural) development. Here, aid to higher education would become even more meaningful and justifiable.

Reconciliation of German Aid with Asian National Plans

Two Asian spokesmen discussed the development strategies of the Asian governments, and the possible ways in which these strategies could avail themselves of German cooperation. The need for precise formulation of aims and delimitation of interests was enunciated. The two speakers used almost identical words in referring to the need for the Asian countries to be self-reliant. They saw as an ideal a situation in which the politicians were sufficiently well educated to realise this need for self-reliance. One spoke of the effects when political desires were not matched by real understanding. If this understanding was lacking, he said, a situation could be reached in which expansion of education moved along a one-way track to the universities rather than spreading out to the other institutes of higher education.

During this discussion the opinion was voiced several times that the different development policies of the different Asian countries called for various different responses and strategies of cooperation from the German agencies.

CHAPTER 7

FINAL REPORT FROM THE COMBINED WORKING GROUPS

SECTION 7.1

REPORT

The three working groups as originally constituted had given their attention to the three topics — teaching, research and community service. As the conference proceeded it became clear that other divisions cut across these. It became clear too that whereas the traditional cooperation between the German agencies and the developing countries had occurred in universities and institutions modelled on the pattern of universities and institutions of Europe, there might now be a greater need for cooperation with institutions more specifically patterned to suit the needs of the developing Asian situation. These might be, on the one hand, smaller, more local, more applied, and perhaps more closely related to the needs of the masses. Or, on the other hand, they might be supra-national (e.g. RIHED and the SEAMEO institutions of Southeast Asia), working toward regional cooperation in various matters.

There was so much interest in these divergent possibilities, that it was decided that the working groups should be reorganised in order to give more detailed consideration to the three types of institutions, and for purposes of the conference they were categorised as metropolitan, local and regional, as follows:

1) *Metropolitan Institutions.* In most developing countries the earliest established institutions of higher learning were set up in the capital cities. Influenced by their environment, these institutions have now developed a metropolitan character. They usually have high academic standards, links with overseas institutions, emphasis on research, and a magnetic attraction for students who hail from the countryside to study, and after graduation remain in the metropolitan area.
2) *Local Institutions.* At a later stage in development there come to be established institutions which, for the purposes of this conference, are designated by the name "local". They are often geographically placed to serve a locality, a province or an ethnic group. Such institutions are often less well endowed than the older metropolitan institutions, they usually emphasize teaching more than research, are oriented towards applied rather than "pure" subjects, and may carry less prestige than the metropolitan type of institution.
3) *Regional Institutions.* In the present context, the word "regional" is used in its supra-national meaning. The regional institutions may have been established in various ways. They are usually international, and they usually tend to lay much emphasis on research and international collaboration. There are two types of such organization. They may be institutions of higher learning, whether awarding degrees or not; or they may be associations of institutions, coming together to promote and advance learning and research.

Subsequently, the participants were formed into three groups, so that each group could give special attention to *one* of the types of educational

institutions. In order to ensure cross-fertilisation between the groups, participants came together for discussion in plenary session, divided into twelve small groups for specialized discussion, and again came together in plenary session to put together all the ideas which had been mooted. The effect of this method of organisation was that the final presentation of the findings of the working groups was an all-embracing document. Discrimination between ideas was not achieved. All proposals were recorded, whether or not they met with unanimous or majority support.

The results of the discussion can be best presented under four headings: Policies, Programmes, Implementation and Evaluation. The matrix in Table 1 shows the questions to which participants addressed themselves under each of these headings. And each of the headings was considered in relation to each of the three types of institution. The suggestions made by participants in relation to each type of institution and each heading will now be presented. The index figures and letters are the same as those in the matrix (see Table 1).

A. Metropolitan Institutions

A.1 Policies in regard to Metropolitan Institutions

The policy factors common to most of the metropolitan institutions which *favour and support* effective Asian/German cooperation were considered to be the following:

- The existence in these institutions of a concentration of academic expertise.
- The quality of the highly selected students.
- The existence of higher degree programmes and the general intention to upgrade the research output of the institutions.
- The high degree of utilization of the expertise existing in the institutions, and the tendency for this utilization to extend over the fields of economics, national development and industrialisation — and also over fields such as education, health and agriculture which may have a direct impact on the masses.
- Arising from the first four factors, the prestige of the institutions both nationally and internationally, which then facilitates the offering and acceptance of service from the institution to governments and agencies.
- The possibility of these institutions providing training and academic inspiration for the local institutions.

On the other side there are factors which tend to mitigate the effectiveness of Asian/German cooperation, and must be listed as *unfavourable*:

- The tendency towards the involution and the formation of an elite academic body — which might be said to suffer from "ivory tower syndrome".
- Arising from the above, the tendency to indulge in prestige programmes which may have little or no direct effect on the masses, and which maybe even so remote from reality as to have no effect on the associated local institutions.

TABLE I

MATRIX DIAGRAM USED BY WORKING GROUPS

(Each set of questions was considered in relation to each type of institution. The diagram shows the paragraphs in this chapter which relate to each set of questions and each type of institution)

Type of Institution / Questions Considered	Metropolitan A	Local B	Regional C
1. Policies What can be said about existing cooperation policies between governments and institutions of higher education? What aspects are favourable? What aspects are unfavourable?	Para. A.1	Para. B.1	Para. C.1
2. Programmes What programmes exist, and what programmes could be developed? What criteria should be used in programmes selection? What are the constraints existing or possible?	Para. A.2	Para. B.2	Para. C.2
3. Implementation How can policies and programmes best be implemented, considering techniques, allocation of resources, instruments, and changing attitudes?	Para. A.3	Para. B.3	Para. C.3
4. Evaluation How may programmes best be evaluated, and their quality controlled? How can information be fed back to the organisations involved?	Para. A.4	Para. B.4	Para. C.4

- The possibility of conflict of opinion between the institutions and the government, so that (in contra-distinction to what has been said above in connection with favourable factors) relations are unsatisfactory and the work of the institution neither appreciated nor supported.

The policies of the donor government are also seen to be sometimes less than conducive to effective cooperation. Points here which are specially likely to hinder the development of effective cooperation with the metropolitan institutions are:

- Plans being made on a short-term basis, rather than with due consideration and planning for long-term operation.
- Over hasty action, without careful assessment and feasibility studies.
- The spreading of resources too thinly, with single experts rather than a team.
- The provision of equipment without due consideration as to whether facilities are available for its maintenance and repair, and whether it is appropriate and likely to be fully utilized.

A.2 Programmes in Metropolitan Institutions

The metropolitan institutions have in many cases been modelled on the older institutions of Europe and America, and their programmes tend to be reflections of European or American prototypes. Their usual aim is to generate a growing establishment, which will enjoy international prestige, and the immediate objectives are usually expansionist — the seeking of funds, the introduction of new disciplines, and the growth of existing departments.

It was the general view of participants that in such expansion the metropolitan institutions should give priority to such research and teaching as could most directly serve national and regional needs; and that national needs should be met in two ways — both directly, and also indirectly through cooperation with and training for the local institutions.

Two rather general ideas were proposed, although without details of how they might be put into effect:

- The exchange of complete units — that is, both staff and equipment — between institutions of higher learning.
- The establishment of centres which could attract very high quality staff by offering higher salaries and better facilities. In discussion these were referred to as "Brains Trust" centres. But the idea has certain similarities to the concept of "Centres of Excellence".

The *criteria* suggested to be used by the German agencies when considering which proposals should be supported, were as follows:

- Conformity to the national priorities of the Asian country.

- Contribution to the improvement of the Asian university in respect of quality and productivity.
- The direct service value of the proposed cooperation to the people of the Asian country.
- The nature of the proposed cooperation, which should combine the (sometimes contradictory) characters of being innovative, relevant, capable of being maintained indigenously at the end of the cooperation, and maximising the use of existing equipment and facilities.

A list of *constraints* was offered, perhaps reflecting the personal experience of the German participants in the particular country and the institution in which they work. This list includes:

- Language difficulties hampering communication between the German worker and the Asian student.
- Limitations imposed by Asian traditions, restraining the overseas lecturer from exerting a "real" influence on the situation. These limitations are manifested in some cases as "lack of receptivity and cooperation" when new ideas are presented.
- Tendency towards abstract theory rather than practical application. Two contributing factors were presented, and these are so interlocked that it is hardly ever possible to decide which one is the prime factor: on the one hand, the staff of the universities were observed to place emphasis on theory, ignoring practice; on the other, it is observed that essential equipment for practical research and demonstration is lacking.

While no method has been discovered whereby the dilemma just mentioned can be resolved, it was in general suggested that the limitations of finance are often at the root of many of the difficulties experienced in Asian/German cooperation. Thus three courses of action were suggested to improve the cooperation by *removing some of the constraints* — and the first of these is the improvement of finance:

- Provision of funds for the improvement of facilities, and for the opening up of university education to students from low-income families.
- Improvement of the numbers of well qualified staff (with a note that finance plays an important part in this too).
- Increased attention to the assessment of proposals, with special consideration being given to the formulation, construction, implementation and final evaluation of proposals and programmes, while bearing in mind the capacity of the institution to support them and the ability of the country to absorb them.

A.3 Implementation in Metropolitan Institutions

The techniques and resources to be utilized in implementing German/Asian cooperation can be grouped according to whether

they are directly related to the Asian people, whether they are related to the people only *through* their effect on the universities, or whether they are simply general techniques which will have a general improving effect on the existing cooperation.

In connection with the *direct* effect on the Asian people it was suggested that a determined effort is needed to improve communication, interaction and involvement between the masses and the universities. This presents such a challenge to traditional systems and approaches that it may be more important to change the attitudes of politicians and academic staff than to think of changing the attitudes of the masses. It is acknowledged that it will be necessary for German experts to seek close identification with Asian customs and culture, and it was suggested that for this (and other) reasons long-term assignments were preferable to short-term.

It was suggested that the people and the universities could be brought closer together by:

- Provision of scholarships to academically able students from low-income, low-status groups of the society.
- Provision of extra-mural education.
- Involvement and participation by prospective employers in the cooperation.
- Closer liaison between metropolitan and local institutions.

In connection with the *indirect* effect on the population, the improvement of the universities is set as the first objective, and it was suggested that this should be achieved by some or all of the following:

- International cooperation in respect of the efficient utilization of resources (financial, physical and human).
- The placing of more than one "expert" in a department, since it is considered that the solitary expert is less efficient.
- International exchange of staff in *both* directions.
- Training of counterparts, with final training taking place in Germany.
- Sponsored research work.
- Upgrading of physical conditions.
- Provision of finance for repair and maintenance of donated equipment, and advice in the ordering of equipment which might be expensive and difficult to maintain.
- The adaptation and transfer of theory into practice in areas where this can be clearly demonstrated and observed.
- Validation and agreement of degree standards. It is considered by some that in this connection there might be changes involved which would amount to nothing less than "deep restructuring" of the present university systems.

In connection with those *general* techniques and instruments which might facilitate and improve cooperation, the following points were suggested:

- Complete planning in detail of the implementation stage of cooperation before it is launched, and the listing in the planning stage of milestone objectives which can then be checked, evaluated and reconstituted as necessary during the course of the programme.
- Notwithstanding the complete planning of the cooperation, the financial arrangements should have some flexibility to accommodate the needs of project managers and experts.
- Attention to such techniques as seminars, practical project work, sandwich programmes, inter-disciplinary programmes, in-service training, on-the-job training, and methodology up-grading courses, for example, in the use of audiovisual aids.

A.4 Evaluation of Cooperation in Metropolitan Institutions

If the evaluation of cooperation with the universities is to be effective the first prerequisite was seen to be that the aims and objectives of every project undertaken should be clearly defined at the outset. Only in this way could a standard be set up for evaluation of the final effect. It was suggested that both the initial setting of objectives and the final built-in assessment of value called for international cooperation and collaborative work by both German and Asian experts. It was also to be noted that evaluation of the metropolitan institutions should be undertaken along with evaluation of the regional and local institutions, so that a total picture could be obtained.

Thereafter the evaluation should consider two main areas — one is the effect of the programme on the institution with which the cooperation exists, and the other is the effect of the programme on the students of the institution, who may be considered to be the end-products of the process.

In regard to the *universities* the following actions were suggested:

- Collection of information on staff movements.
- Use of independent external examiners for Master's and Doctor's degrees.
- Establishment of machinery to measure the needs of the situation against international standards, so that an assessment may be made of the aptitudes and abilities of the staff.
- Publication of ratings and standards on a national and international basis.

In regard to the *graduates* it was suggested that their value to their own community should be assessed by:

- Study of their careers after graduation, with emphasis on evaluation of job-performance.

- Accumulation of statistical information on their migration pattern and flow.
- Survey (on a statistical basis) of the opinions of employers and self-employed workers.

B. Local Institutions

B.1 Policies in regard to Local Institutions

In contrast with the older established metropolitan institutions which have already been considered, the local institutions tend to be more recently established, and have such characteristics as enthusiasm, lack of finance, changeability, and concern with the immediate surroundings.

There is a trend in current opinion towards the encouragement of "local" or "provincial" institutions of higher learning, sometimes in the form of universities, sometimes as professional, technical or agricultural institutions, and often in very close relationship with the population and its immediate needs. This trend is manifested in:

- The special interest of the World Bank (IBRD) programmes in provincial institutions.
- The tendency towards decentralisation, whereby responsibility for institutions of higher learning tends in some countries to be shifting from the central government to the provincial governments.
- The tendency, where the national government continues to hold responsibility, for new governmentally sponsored institutions to be established outside the capital city. This is in contrast with privately sponsored institutions, which still tend to proliferate within and around capital cities.

When local institutions are compared with metropolitan and regional institutions there were found to be distinct *advantages* associated with their local situation in which the young and developing institution interacts with the local population and its interests. Some of these advantages are:

- The reduction in cost since the students are locally domiciled.
- The interest and support that the institution can gain from the local politicians.
- The attraction which the institutions exerts, drawing industry to the locality and thus increasing job prospects, and improving conditions.
- The opportunity for courses and programmes to be designed for local requirements.

Where local institutions already exist they are apt organisations for German/Asian cooperation. From the point of view of the institution, the cooperative aid from overseas frees them from total dependence on their own government finance and increases their autonomy. From the point of view of the German experts the

advantage of these institutions is that they present a situation where new methods of organisation can be applied with some hope of upgrading teaching and research.

A list of *disadvantages* was mentioned as being inherent in the local situation and which operates against the success of German/Asian cooperation in the local institutions. Some of these are:

- Difficulty in obtaining visiting experts.
- Difficulty in maintaining adequate facilities for the work of visiting experts (which may partly be the cause of the above-mentioned difficulty in obtaining these experts).
- Difficulty in drawing the best students to study any particular discipline, since the "catchment area" is local and restricted.
- Difficulty in attracting and retaining staff, with all the consequent damaging effects of rapid staff turnover. This difficulty often applies so strongly, that even when staff have been trained overseas and have been obliged to teach in the home institution for a number of years, they will leave as soon as their obligation has been fulfilled.
- Difficulties due to small size — lack of international connection, tendency for research to depend on one person and collapse after his going, etc.

Other difficulties in relation to the local institutions, and which were deemed to militate against German/Asian cooperation were enumerated. These concerned mainly the areas of administration and inter-governmental relations:

- Where the different disciplines of the institution are connected with the work of different ministeries of the government there may be a lack of cooperation between them.
- Overseas cooperation may be under the aegis of a special ministry or department, and therefore not easily accessible to the local institution.
- Where governmental cooperation is established it may still be difficult for private local institutions to enter into this cooperation — a difficulty which may originate either with the German or the Asian government concerned.
- And in addition to the above mentioned inherent difficulties, there may be governmental policies which channel aid to institutions other than the local ones — such policies originating either with one government or with both.

It may be seen as a disadvantage that the local institutions are often directed towards low-level technology and vocational training, and that their entrance requirements are sometimes of lower academic standing than those of the metropolitan institutions. This would certainly appear as a disadvantage if some ideal of elevation and imitation of other institutions were the objective in view. But if the necessity of *different* entrance

qualifications and *different* technological objectives is accepted, then the local institutions can be seen as simply having these characteristics — peculiar to themselves but not necessarily disadvantageous in any proposal to arrange German/Asian cooperation.

B.2 Programmes in Local Institutions

The *criteria* suggested in identifying and establishing cooperative programmes in the local institutions appeared to put the emphasis on the "localness" of the situation. Thus it was suggested that the programmes should fit in with local milieu and should serve it before national or regional considerations were pondered over. Some criteria to be met are:

- Ability of the new programme to fit into the existing local educational scheme.
- Possibility of enlarging existing educational activity.
- Service to the local situation and population in respect of the students, the social environment, the state of industrialisation or agricultural development, etc., this service criterion being taken into account not only in respect of teaching, but also in respect of case studies, research, accumulation of data, etc. which should all be related to the local situation.
- Possibility of drawing on the local situation for support, personnel, administration and management, to ensure continuity of growth with the locality.

In the establishment of local programmes it was suggested, although it is hardly a criterion, that the matter of cooperation between local institutions should be considered, as also should the similar question of cooperation of local and metropolitan institutions. All possible opportunities should be taken to strengthen communication and assistance between institutions. If this can be done then the international cooperation will be more productive.

The main *constraints* operating in the local institutions were said to have arisen from the often underdeveloped state of the institutions. The following are listed:

- General lack of funds, staff, counterparts, buildings, materials, machines and manpower. A project which seeks by cooperative effort to improve one or a few of these may be constrained by lack of the others.
- Management skills may be sometimes of a low standard.
- Lack of facilities and expertise for the maintenance of scientific equipment is particularly felt in the "local" situation.

The interaction between educational institutions was found to have often been lacking in the "local" situation, and in its absence the local institution tended to have become an isolated entity, concentrating on local problems, having no exchange with other

institutions in the region, enjoying little prestige, and thus attracting the second-rate rather than the first rate staff and students. In the larger context of the nation the gravitation of staff and students to the metropolitan centres has a damaging effect in many ways, causing, for instance, a stagnation of the standards of the local institutions.

B.3 Implementation in Local Institutions

It was suggested that the keynote for implementation at the local level must be a combination of comprehensive planning and flexibility. Planning should be detailed, with a step-by-step procedure so that progress can be monitored as well as communicated to the local population. Then, as required, the plan should permit modification in response to changing circumstances.

In regard to upgrading of the staff the usual methods were suggested:

- Seminars, conferences, study tours and in-service training.
- Scholarships and fellowships for study in Germany, with the proviso that the scholars and fellows will work in the local institution on their return.
- Regional training courses, e.g. UNESCO, FAO, SEAMEO, etc.
- Arranging by some means that local counterparts and staff being upgraded through research should be relieved of some of the burden of teaching duties; and that in general the conditions of work of local staff should be improved, so that they are not forced to dissipate their academic energies on unproductive work.

Linkage between local institutions in the region was suggested, and to be in the following manner:

- Pooling and sharing of resources and facilities.
- Exchange programmes for staff between institutions in Asia.
- Cooperation between local institutions in the implementation of scientific and technological innovations.
- Cooperation in defining common standards.

There should also be linkage between the local institutions and the industries and governmental departments in the area. In this two-way process, some of the manifestations should be:

- Close links with industry through advisory boards, industrial training boards, practical workshop training, consultancy and sharing of experience by visiting German experts (serving industry directly as well as indirectly through the local institution), collaborative training wherein the students benefit from the facilities of industry and the industry benefits from their work and saleable items are produced. This collaboration which is initially between the institution and the industry can lead to better understanding between prospective graduates

and their prospective employers.

- Close links with the departments of the ministry of health which operate in the locality. The human resources in the medical field, e.g. doctors, dentists, etc., should be drawn in to take an active part in the curricula of the institution. Specific curricula should be set up to deal with local health problems. In rural situations training programmes should be instituted for para-medical workers.
- Similar close links should be developed with other agencies and disciplines — such as agriculture, tourist boards, fisheries, education, etc. — and in all these activities the cooperation given to the Asian local institution from Germany should involve itself not only with the institution, but also with the field work in conjunction with the local agencies and disciplines and their practitioners.

It was suggested that German/Asian cooperation comes closest to the masses in the local institutions. The present local institutions are in some cases more closely linked to metropolitan and theoretical developments than to the grassroots needs of the people of their locality. Where this is the case it may take many years to effect a change. It is thought to be desirable that the people of the locality should be able to voice their demands, and exert pressure on the institutions to meet these demands. This is an educational problem, and it is attitudes which need to be changed. Some of the factors which are seen to be desirable if German/Asian cooperation is to have an effect here are:

- Free flow of information, through television, radio, seminars, guest speakers, study-service, etc.
- More direct involvement of students and faculty members in the life of the local community.
- Improved communication between the institution (as a body) and the local (and village) government.
- Concentration on attitudes (within and without the institution) since attitudes are considered to be the "agents of change".

B.4 Evaluation of Cooperation in Local Institutions

Evaluation procedures to be applied to cooperation with local institutions are essentially similar to those to be applied to cooperation with metropolitan institutions. But the emphasis was rather differently placed. In the case of the local institutions, where effort is often directed to up-grading of staff, special attention should be given to assessment of teaching standards. It was suggested also that local institutions would benefit from the establishment of a national body to validate the standard of their curricula and degrees.

It was further recommended that the impact of the local institutions on the community — a measure of the effectiveness of the cooperation — should be examined in respect of the main

disciplines of the institution.

In the case of the two major fields of industry and education regular evaluation should be obtained from:

- Graduate replies to questionnaires.
- Collection of information about employment.
- Knowledge of industrial activity, sales, salaries, etc.
- Information on research undertaken for industry.
- Cost-effectiveness studies of the training and education offered by the institution.

In the special case of community and health services, assessment should take into account data concerned with standards of living, and health and welfare of the community. The effectiveness of these programmes should be reflected in the actual state of health and welfare of the population, and the information should be obtained about this from the village level and from government officials.

C. Regional Institutions

C.1 Policies in regard to Local Institutions

A number of varied factors considered *favourable* to the development of German/Asian cooperation in and through regional, supra-national institutions was listed. Some of these are:

- Likelihood that the institution can be independent of national politics and policies.
- Avoidance of duplication; positive effect of pooling of resources.
- Elevation of standards by exchange of ideas and some element of competition.
- Possibility of offering activities and courses which a single country could not support.
- Beneficial effect on metropolitan and local institutions.
- Attraction and retention of distinguished staff, and less "brain drain" to other parts of the world. (But see below).

The factors which were seen to be *unfavourable* to German/Asian cooperation in regional institutions are in some cases merely the converse of those above. Thus among the unfavourable factors are listed:

- The different policies and priorities of the member nations.
- The difficulty of designing programmes which will meet the needs of member nations.
- Tendency for regional institutions to deal with member governments, and not to form close links with other institutions.
- The "brain drain" from the metropolitan and local institutions to the regional institution. Besides its direct impoverishing effect this also leads to envy and alientation.

Other unfavourable factors are:

- Institutional boards may be overloaded because of the necessity to have *equal* regional participation.
- Differences in member countries and their needs may demand a multi-facetted approach.

With special reference to cooperation as it affects the masses, the regional institutions are seen to be obviously the most remote from the masses among the three types of institution considered. Some of the unfavourable factors associated with this are:

- Staff and students of the regional institution may form an élitist class and lose contact with the masses.
- Communication is constrained by the necessity of using a mutually comprehensible language which may not be the first language of the staff member or student concerned.
- Tendency for regional institutions to be located in capital cities.

C.2 Programme of Activities of Regional Institutions

The criteria for programme of activities of regional institutions as suggested by the participants were as follows:

- Serve the advanced aspects of higher education in the development and application of science.
- Be innovative.
- Pay regard to politically sensitive features and areas.
- Promote an intensive and free flow of information, and exchange of ideas between nations.
- Be relevant also to community leaders.
- Deal with such problems of the region as public health, population growth, food production, manpower, etc.
- Constitute a supra-national service for metropolitan and local universities.

Some of the *constraints* seen were the same as the "disadvantages" mentioned in the previous section i.e.

- Different priorities as seen by the member nations and donors.
- Language barriers, and the need to use a common, but perhaps unfamiliar language.
- Different cultures, aspirations and ideologies among the constituent members.
- Confusion and contradiction brought about by having requests and ideas from different member countries.

Another constraint was seen, in that regional institutions may be small, and it may not be possible for the academic staff and research workers to reach the "critical mass". This was a serious constraint, which would operate too in the case of small local institutions.

C.3 Implementation of Programme Activities of Regional Institutions

The regional institutions were visualised as resource centres;

experimental situations in which model projects may be tried out; centres for the development of curricula, textbooks, media, etc; centres for problem-oriented thinking and innovation; places for the meeting of experts from different countries; consultation centres; venues for regional seminars, symposia and conferences; and training places for regional academic workers. Regional institutions were thought to be places from which inspiration will be radiated and relayed down to the metropolitan and local institutions, as well as to the national and local authorities.

It was suggested that in German/Asian cooperation with regional institutions the functional strengths of each country should first be identified, and after that further research and careful consideration of possible effects should be undertaken before any programme is implemented. It was further suggested that an important function of the cooperation is to identify and emphasize mutual relationships between national and regional institutions, and to promote a more active role by national institutions in the creation of national policies.

The main instruments of German/Asian cooperation in the regional institutions were seen as being:

- Provision of long-term lecturers or experts in specialized fields.
- The opening up of access to international expertise, information banks, etc.
- Initiation of projects, which are not necessarily restricted to one particular institution.
- Introduction and access to international sources of funds.

C.4 *Evaluation of Cooperation among Regional Institutions*

In proposing *criteria* for evaluation, priority was given to the statement that institutions and programmes should in every case be capable of continuing and being self-supporting after the cooperation period has been phased out. New programmes should have an evaluation procedure so that the institutions may be evaluated by qualified external assessors as well as by all of the parties concerned.

To be sure, international recognition and reputation are indices of quality. But it was suggested that each of the following should be regularly evaluated:

- Progress of students, based on initial and final assessment.
- Quality and performance of staff.
- Demands made by member countries and their degree of satisfaction.
- Publications originating in the institution.
- Distribution (national and geographical) of students.
- Post-graduation performance of graduates.
- Spread and dissemination of ideas originating in the institution.

And in all cases the evaluation should be on the cost-benefit basis.

SECTION 7.2

DISCUSSION

This discussion will be summarised in two parts, the first dealing with those aspects which are generally applicable to Asian-German cooperation throughout Asia, and the second, dealing with those aspects where differences exist between the Asian countries.

Aspects of Cooperation which are Applicable throughout Asia

Government Policies

It was generally agreed that neither German agencies nor institutions of higher education could serve the masses of Asia except through action in accordance with the policies of the national government. The meeting was reminded that these policies are laid down in each country's development plan, which are authoritative, taking precedence over *ad hoc* statements made by individual politicians.

Governmental policies and plans usually had as their first objective the economic development of the country. Thus cooperation in accordance with the main objectives of such plans would generally tend to influence the masses of each country indirectly and via the total economic development of the country. Nevertheless it would be possible for German agencies, operating within the directives of each country's development plan, to choose to give preferential support to those proposals which were at least more directly connected with the masses.

Members of the conference were inclined to favour support for local institutions and appropriate technology. It was completely accepted, however, that the most necessary factor in the establishment of such institutions and the provision of such technology was government policy and government action, and the contribution made by cooperating agencies could be only supportive and responsive to such policies and actions.

The Problem of Development Benefitting the Masses

The relationship of higher education to the masses was again discussed in this session. When foreign agencies consider ways and means of assisting and promoting development in an Asian country it appears at first sight that support for higher education is a suitable means of offering assistance. It is cheaper, for instance, for Germany to promote development in an Asian country by offering educational assistance than by injecting capital. It is possibly also more efficient. But can it be assumed that "development" promoted in this way necessarily reaches the masses? To put the question in another way — in offering assistance and cooperation in higher education, is the developed country concerned with "higher education for development" or "higher education for the masses"? Participants from Asian countries were inclined to follow whatever policy their own government had enunciated. They saw benefit to the masses as something which would accrue through the total development of the country, and insofar as the Asian countries differed in the stages of their development the priorities of implementation were seen to change, with both direct education and its indirect benefits reaching the masses as development proceeded. It was among a number of participants that the question was seen in antithetical form, and some participants felt

that higher education should be brought to the masses, while a majority was more inclined to see the masses as benefitting indirectly through the smaller numbers of people who had directly received higher education. This difference of opinion was not resolved. It was generally agreed, however, that the means by which higher education could benefit the masses in Asia was determined significantly by the Asian governments' policies and not by donor countries.

Intra-Asian Relationships in Higher Education

If there is a consensus that education is one part in the framework of each Asian government's development policy, and if German aid could be offered to institutions of higher education *within* this framework, then it becomes important to consider the institutional relations within the Asian countries between their different institutions. Are there existing connections between the various types and groups of institutions and of what kind? Reference was made to the report on the last conference in Africa (*University Education and Research in Africa and the Role of Educational and Scientific Aid of the Federal Republic of Germany*, Taita Hills Lodge, Kenya, 20-30 September 1976) where a hierarchical relationship between institutions was regarded to be evolving. Was this true also of Asia? A participant spoke of the Indian situation where he saw signs of such a development, with the metropolitan institutions concentrating on teaching and research and having increasingly a "big brother" attitude to the local institutions. This raised the question again of whether, in such metropolitan institutions, higher education was not directly *for* the masses, but was rather a development *for an élite* through whom later benefit to the masses would be mediated.

The discussion went on to the question of the Asian regional institutions where the governments, as in the Southeast Asian Ministers of Education Organisation (SEAMEO), had initiated regional policies. What place was there for German cooperation in such regional organisations? From the German side it appeared that there would be no problem in arranging cooperation with regional units where these were government sponsored. Difficulties might occur, however, if the regional type institutions were not backed by Asian governments.

Research in the Asian Institutions

The question was asked whether there was need for basic scientific research in the institutions of higher learning in developing countries. A number of conflicting aspirations was noted, where for instance the visiting expert or the overseas trained Asian academic might be desirous of pursuing research in some relatively abstruse field, and the government might be asking for applied research directed to the practical solution of local problems, while the masses might be clamouring for widespread general education and the reduction of money spent on research. It was noted that there was some tendency for Asian governments to wish to concentrate applied research in the local institutions and basic research in the metropolitan institutions. It was also noted that certain governments would like to promote basic research as a matter of prestige.

Manpower and Job-training

The aspects of manpower and job-training were discussed. In respect of

quantity the need was seen for institutions to work closely with governments to try to meet the manpower needs of the country. A necessity was seen for institutions of higher education to participate in research and projection of manpower needs, and this could be a particularly useful area of cooperation. With regard to job-training, this was seen to be a function of at least the local and the metropolitan institutions of higher learning, while regional institutions some of which were highly technological could serve this function for a number of countries. It was suggested that a third party, the employer, should be drawn in when job-training was being considered. Various examples were quoted, a notable one being Jordan, where the oil refineries were providing funds for appropriate education.

Aspects of Cooperation in Particular Regions

The Questions of Non-government Sponsored Institutions

In most countries of Asia the institutions of higher learning have been initiated and financed by the government of the country. Few, if any, are endowed in the manner of the older established European institutions. The question arose whether German aid could be provided for "private" institutions, and this question was particularly related to the Philippines where there are many private institutions which are not financially supported by the government. The answer appeared to be that German cooperation could be made available provided it was channelled through a government agency.

Infra-structure, Concentration, and the Necessary Critical Mass

There was some support, particularly from the German experts who had worked in Asian universities, for the idea that academic cooperation demanded in the Asian cooperating institution a necessary level of prior development and growth. Only if such prior growth had been achieved would the work of a highly specialized visiting expert be possible. It was felt by the proponents of this idea that the drift to the city and the concentration of academic learning in the metropolitan institutions was an "advantage". The "critical mass" was achieved, and the addition of a single expert or a team could then "touch off" rapid educational growth and dissemination of knowledge. This need for prior development was stressed by participants with experience in West Asian countries. Paradoxically it appeared that in the West Asian countries where regional cooperation might perhaps have been expected to provide the pre-requisite concentration of students, facilities and academics, regional cooperation was least acceptable. The countries of Southeast Asia, which had relatively well developed institutions of higher learning, offered successful examples of regional cooperation. India, too, intra-nationally offered successful examples. But it appeared that the countries where education was still in an earlier state of development were just those countries which were politically least likely to favour regional cooperation. It was noted that as among Turkey, Iran and Pakistan there was cooperation to the extent of student interchange and study, although not to the extent of the establishment of regional institutions.

Cooperation in the Field of Health Work and Education

In the field of health work more than in any other the differences between the Asian countries became obvious. While some countries and regions appreciated cooperation in health and medical science at the level of the

metropolitan or regional institution, there were other countries where it was suggested that benefit would accrue to the masses if cooperation and aid were developed at the local level. In those countries with rural populations which were still receiving insufficient health care, there seemed to be a need for support to simple health care programmes, training, and evaluation. Several participants spoke about the need for constant monitoring and evaluation of rural health education. It was then suggested that such programmes and projects were for the direct benefit of the rural masses, and means must be found of enquiring whether the rural masses were satisfied with the results of such programmes and projects. This was at the other extreme from the more conventional Western idea of higher education (accepted in some Asian universities), where the effectiveness of a programme is often measured by the quality and quantity of publications in international journals.

Highlights of the Discussion

The highlights of this rather diffuse discussion were on the function, operation and future of the regional institutions. Those participants who were connected with existing regional institutions — particularly the Asian Institute of Technology in Bangkok, the SEAMEO Centres, and the Indian Institute of Technology in Madras — communicated to the other participants some of their own enthusiasm for the possible benefits of such regional institutions. From the German agencies the question was asked whether such regional institutions were not limited in their work to a lowest common denominator of politically non-sensitive programmes. The countervailing point of view was offered by one of the participants from such an institution when he said that within a regional institution it would sometimes be possible for a scientist to operate more easily there than in the institutions of his own country.

An important point about the regional type institutions was that they were places of innovation. New ideas could be developed and tried out there, and could then later be disseminated elsewhere. They could also be training places for specialist staff, so that young academics from Asian countries could be trained in Asia rather than having to go to Germany.

It was suggested that within regional institutions (and it was always accepted that there could be many different types of such institution) work could be carried out which would simply not be possible in institutions serving a small population. It was suggested that they could be initiators of new methods and new curricula, and that they could be training places where university staff and national educators and planners could study didactics, educational models, non-conventional methods in education, planning, development and technologies which individual countries normally could not support. Hope was expressed that the German agencies would support and cooperate with established regional institutions. It was further suggested that the agencies should give consideration to supporting an Asian institution for educational research and development.

Publication of the Proceedings

At this final session it was proposed and agreed that the deliberations, conclusions and recommendations of the Conference should be published and made available.

CHAPTER 8

CONCLUSIONS AND RECOMMENDATIONS

SECTION 8.1

CONCLUSIONS

At all times during the deliberations of the Conference the participants had in mind the past and present situation and achievements of the Asian institutions of higher education. Thus while the discussion turned on present needs and possible future developments it was within the framework of the extent to which knowledge of the institutions have contributed so far to the general advancement of society, and to the overall development of the Asian nations.

Nevertheless the needs which were met by the institutions and by German-Asian cooperation in the past were different from the needs which exist now. Education *per se* may have been at least in some countries the necessary and sole objective of such cooperation. The topic of the Conference focussed attention on "the needs of the masses", and looking at present needs and future action the Conference concerned itself with the service which higher education can render to the population of Asian countries. In particular it stressed the various aspects of this service which can be rendered to the economically, socially and politically underprivileged masses of the rural and urban areas.

It was agreed that the development policies of the Asian countries seemed to be geared towards the needs of the masses, and towards their participation in the national development processes. It has been mentioned also that these national development policies and strategies tended to strive to integrate all aspects of economic, social, educational and cultural development; and in seeking for this integration they need to use higher education and research as sources of innovation. The place of the institutions of higher education in relation to planning and policy making is very clear. But what is their function in relation to the masses? And when this function has been defined, what then is the role of German cooperation with the institutions of higher education in fulfilling this function?

The basic assumption made by the majority of participants in the Conference was that while higher education systems cannot directly provide higher education for the masses, they must nevertheless be willing and able to make higher education beneficial to the masses.

The information laid before the Conference showed the institutions of higher education in Asian countries to be responding (both in the present and the immediate past) to their situation by providing community service both directly and indirectly through teaching and research. And this community service was seen to have helped reduce hunger and malnutrition, disease, poverty and unemployment, ignorance and illiteracy, housing shortages, etc. Furthermore, the participation of the masses in development, and the benefit accruing to the masses from development seemed to have shown some results.

As regards foreign assistance in general, and German cooperation in higher education and research in particular, it was considered by the Con-

ference that this cooperation could play an ancillary and stimulating role in the endeavour being made by developing Asian nations to solve their urgent problems. In the multi-facetted discussion, as each participant spoke of the particular facet which he could see, there was much discussion of the means by which cooperation should be implemented; but there was general agreement on the desirability of continued and extended cooperation, and emphasis on the need for both accurate investigation of needs and priorities before establishing the cooperation, and evaluation thereafter.

The Conference considered that the function of higher education in relation to the masses could be summarised in the following statement. Higher education can no longer be regarded as an end in itself. It has to fulfil specific tasks for the advancement of the society in general and for the nation's development towards a better quality of life for the underprivileged in particular. Thus in institutions of higher education the teaching and research have to be closely related to the institution's immediate political, economic, social and cultural surroundings. It follows, therefore, that the adaptation of curricula and research programmes to the prevailing societal conditions and needs, and the strengthening of the service functions of the institution, for example, extension, consultancy, and continuing education, deserve the highest possible priority. This applies not only, but with particular stress, to developing countries which are less able than developed countries to afford to establish higher education systems for their own sake, but also to developed countries and to donor agencies which try to assist the developing countries to make their higher education systems function as viable instruments for the advancement of their peoples. Valuable approaches in this direction are to be seen in many Asian countries and also in the German institutions of university cooperation. In full recognition of this the Conference encourages all parties involved to further strengthen their endeavours to make higher education in Asia an ever more reliable and efficient contributor and support for development.

SECTION 8.2

RECOMMENDATIONS

The Conference generally agreed that national development policies and strategies can be successful only if they are directed towards the needs of the majority of the population, and in particular with their participation in the developmental processes. Furthermore, it was considered that such national development policies and strategies should integrate all aspects of economic, social, scientific-technological, educational and cultural development, thereby drawing upon higher education and research as sources of initiative, knowledge and understanding, and for the generation of the methodologies needed for development.

While it was accepted that foreign assistance in general, and cooperation in higher education and research in particular, can play only an ancillary role in the endeavour of developing nations to solve their urgent problems, it is nevertheless recognised that the cooperation of the Federal Republic of Germany with institutions of higher education in Asia has contributed to the development of higher education in some Asian countries.

With the intention of increasing the effectiveness of such cooperation in the future, and procuring the greatest possible benefit for the masses through the contribution of higher education to development, the following list of suggestions has been compiled. The suggestions have been classified as:

a) those having implications both for Asian institutions and for the German agencies,
b) those whose initiation is more likely to come from the Asian institutions, and
c) those which are especially relevant to the German agencies.

A. Asian Institutions and the German Agencies

There is a need for *Asian institutions of higher education,* and for the *German agencies* concerned with assisting and promoting higher education in third world countries, to undertake the following activities:

A.1 Examine and review existing programmes and projects of cooperation in higher education in respect of their direct and indirect contribution to the improvement of the living conditions of the majority of the population of the Asian country concerned; suggest any adjustments or reorientations of the programmes and projects which would increase their contribution to the welfare of the majority of the population.

A.2 Promote in the Asian countries, and in their institutions of higher education, those educational and research activities which are peculiarly relevant to each country's national environment, policies and requirements, realizing that in their situation innovative approaches may be required rather than "traditional" patterns of higher education based on the European or North American model.

A.3 Encourage and increase intra-Asian cooperation in higher education through the establishment and promotion of regional institutes and organizations, regional consultative and research organizations, and regional associations for the promotion of exchange of knowledge in science, education, etc.

A.4 Promote the establishment of specialized regional institutes of higher education which could offer advanced training and experience for university teachers and researchers within the region, and which could thus contribute to improvement of the quality of teaching and research in the national institutions; considering in this connection the possibility of establishing a Pan-Asian organisation or association for research and development.

A.5 Direct and assist the activities of the metropolitan universities in the fields of teaching, research and service, so that these universities may be enabled to emphasize and develop post-graduate training, advanced scientific methodology, continuing education for high-level manpower, and information and documentation services.

A.6 Favour, in the allocation of research funds, those research programmes which are related to the basic needs of the population, and in all disciplines lay emphasis on applied research.

A.7 Promote and favour those academic programmes in teaching, research and community service, which are related to rural development and to the development of appropriate technology.

A.8 Encourage those programmes which involve interaction between various disciplines.

B. Asian Institutions

There is need for the following activities, which might most appropriately be initiated by the *Asian institutions of higher education* and might in some cases after the initial stages become cooperative activities with the German agencies:

B.1 Identify, by appropriate research studies, the needs of the majority of the population, and the ways in which the higher education activities of teaching, research and community service can help to meet those needs.

B.2 Organize seminars, conferences and meetings for planners, policy-makers, administrators and university teachers at national and regional levels, to discuss further the outcome of the present conference, and to clarify the role of higher education in the development process, in the hope that such collaborative discussion could lead to action and to an increased impact of higher education on the participation of the masses in the development process.

B.3 Stimulate the planning, establishment and advancement of local institutions of tertiary education, which being located in the provinces, and especially in the rural areas, would have a close relationship with and response to their environment and the local population.

B.4 Initiate research, which could later probably become a cooperative project, to make an appraisal of the community service rendered by Asian institutions of higher education.

B.5 Promote the intra-Asian exchange of staff, students, information and experience, through such means as scholarships, guest professor programmes, communication networks, scientific congresses, etc.

B.6 Coordinate activities at the national and the regional levels, in respect of curriculum development and research, with the aim of achieving greater efficiency, avoiding duplication, and achieving relevancy to Asian needs.

B.7 Prepare the way for better cooperation with the German agencies (and other agencies, foundations and countries) by the preparation of complete statements identifying problem areas, and by suggesting precisely the forms which cooperation might take.

B.8 Make provision for rapid and wide dissemination of research findings, and ensure the useful application of findings by arranging for close cooperation between institutions and the administrative and productive sectors of the nation's economy.

C. The German Federal Government and the German Agencies

In addition to the cooperative activities already outlined in Section A, there is need for the German Federal Government and the German agencies to undertake the following activities:

C.1 Support research programmes for the identification of the needs of the populations of the Asian countries, in the expectation that when these needs have been identified further consideration and support may be given to the development of teaching, research and service in the universities to meet these needs.

C.2 Establish a long-term policy for cooperation in higher education, so that in accordance with Asian nations' development policies this cooperation may help the institutions of higher education to serve the needs of their people.

C.3 Strengthen and support all forms of intra-Asian cooperation (both intra- and inter-national) in higher education and research, whether on a bilateral or on a multilateral regional basis; and assist in particular those organisations and institutions of higher education which can be expected to serve as models for further intra-Asian cooperation, through exchange of staff, students, research information, etc.

C.4 Support Unesco, the World Bank, and other international organizations, and Asian regional organizations, in their endeavours to develop and apply strategies designed to strengthen the leadership of the universities in social change and economic progress for the benefit of the masses.

C.5 Increase the efficiency of coordination of their aims, activities and instruments in the promotion of higher education in developing countries; and increase collaboration with the agencies of other developed countries in the planning, execution and evaluation of programmes and projects.

C.6 Increase the contact with the "scientific public" in the Federal Republic of Germany — individuals, organizations, and government bodies — so that they may be stimulated and encouraged to more active participation in educational and scientific cooperation and exchange with Asian institutions of higher education.

C.7 Invite Asian scholars, policy makers, planners and administrators to visit German institutions of higher education, with the aim of increasing interaction and mutual understanding between them and the German scholars, policy makers, planners and administrators.

C.8 Promote, especially by invitation to visit Germany, the study by Asian policy makers, academics and administrators of the relationship between their activities and the demands of the public and private sector.

C.9 Give preference in the support of cooperative efforts to the following:

a) Improvement in the teaching/learning situation in Asian institutions of higher education through specific support for curriculum development, pedagogic training for university teachers (both German and Asian), preparation of textbooks, educational technology and the utilization of management techniques in higher education. (*vide* B.6)
b) Development of models in respect of institutions, curricula, research and community service, from which might be expected the strongest possible impact not only on the advancement of the urban and rural poor, and also by way of feedback on academic training, research and service in the region. (*vide* B.1 and B.4)
c) Institution and advancement of applied research in fields and forms which can be expected to produce direct benefit for the masses. (*vide* A.6)
d) Integration between disciplines in development, research and training, by supporting programmes and projects which will help such integration to develop, and especially integrated or multi-disciplinary programmes and projects in rural development and appropriate technology. (*vide* A.7 and A.8)
e) Selection of partner institutions whose situation makes it likely that programmes and projects instituted will continue after the completion of the cooperation, and will be well integrated into national and regional schemes.
f) Planning, establishment and advancement of local institutions of higher education, with the special proviso that such support to local institutions should not preclude support to metropolitan institutions, where similar cooperation at the departmental level may in some situations be appropriate. (*vide* B.3)
g) Planning, establishment and advancement of regional institutions of higher education. (*vide* A.3)

C.10 Emphasize, with reference to the instruments of German cooperation, the following points:

a) Establishment and continuation of closer contact with Asian institutions of higher education and with German staff attached to them.

b) Provision of more information on development projects, national planning, aid programmes and projects, and cooperation procedures.
c) Increased response in terms of speed and flexibility to changing conditions in the Asian universities where programmes and projects are operating.
d) Extension and enlargement of staffing programmes.
e) Sending of teams, rather than individuals, wherever this is appropriate, while at the same time aiming at their integration into the host institution.
f) Responding rapidly to requests by sending short-term consultants and guest professors, while, at the same time, responding to the need which sometimes exists to extend the contracts of long-term staff.
g) Consideration of the possibility of subsidising professorial chairs in Asian universities.
h) Extension of the "sur place" scholarship programme.
i) Increasing the upper age-limit of fellowship eligibility for Asian applicants.
j) Encouragement to German universities to invite distinguished Asian scientists and scholars to visit them as guest professors.
k) Exercise of care in the provision and selection of equipment for Asian universities, giving due attention to the appropriateness of the equipment, its adaptability, and the necessity of funds and facilities for its maintenance.

The ideas and suggestions expressed above are to be thought of as a framework, upon which the participating parties can build their future cooperation for the benefit of the masses.

Finally it was suggested that, by whatever initiating agency, further conferences should be organized for discussion between German and Asian experts with the aim of generating further creative collaboration.

APPENDIX A

PROGRAMME OF JOINT DSE-RIHED CONFERENCE

Thursday, 1 September 1977

Morning	*Opening Session*
9.00 a.m. – 12.00 noon	Welcome Address by Dr. S. Nasution, Director, RIHED
	Address by Mr. Hartmut Glimm, Head, Higher Education Section, DSE
	Address by Mr. Jurgen Chrobog, Chargé d'Affaires of the Embassy of the Federal Republic of Germany, Singapore
	Keynote Address by Dr Swasdi Skulthai: *Higher Education and the Masses — A "Thought"*
	Address by Dr. Wolfgang Armbruster, BMZ
	Address by Dr. Wolfgang Küper, GTZ
	Address by Miss Marga E. Schmitz, DAAD
	Self-presentation of participants
	Information on the Programme and Announcements
12.15 – 12.45 p.m.	Steering Committee Meeting
	Phase I: Response of Higher Education Systems to the Growing Demand for Higher Education
Afternoon	*Plenary Session I*
2.00 – 5.15 p.m.	Chairman: Mr. Raja Roy Singh
	Rapporteur: Dr. Annie B. Elliott
	Papers presented by:

1. Dr. Victor M. Ordonez: *Trends in the Democratization of Access to Higher Education in Asia*
2. Dr. A.O.B. Situmorang: *The Present Response to Growing Demand for Higher Education in Indonesia*
3. Prof. Wu Teh-Yao: *Higher Education for Whom and for What?*
4. Prof. Dr. Ran Soo Kim: *The Conflict between the Social Demand for Open Access and the Demand for Academic Quality in Korean Higher Education*

Discussants:
1. Dr. Dietrich Herrmann
2. Dr. Wichit Srisa-an
3. Prof. Dr. Hans Wagner
4. Dr. Horst Frischkorn

General Discussion

5.30 - 6.15 p.m. Steering Committee Meeting
6.15 - 8.00 p.m. Country Group: Republic of China (Taiwan)

Friday, 2 September 1977

Morning *Plenary Session II*

9.00 a.m. - 12.00 noon Chairman: Dr. Victor M. Ordonez

Rapporteur: Dr. Annie B. Elliott

Papers presented by:

1. Dr. Bikas C. Sanyal: *Higher Education and Socio-Economic Development*
2. Dr. Dietrich Herrmann: *Effects of Intensive Industrialization on Higher Technical Education as Seen in Indonesia*
3. Dr. Ediz Ulusoy: *High-Level Manpower Requirements in Agriculture and the Capacity Problem in Turkish Higher Education*
4. Dr. Wichit Srisa-an: *Democratization of Thai Higher Education*
5. Dr. Horst Frischkorn: *Higher Education in Iran*

Discussants:
1. Mr. Raja Roy Singh
2. Dr. Amnuay Tapingkae
3. Dr. Ediz Ulusoy
4. Dr. A.O.B. Situmorang

General Discussion

12.15 - 1.15 p.m. Steering Committee Meeting

Phase II: Higher Education and the Needs of the Masses

Afternoon *Plenary Session III*

2.00 - 5.00 p.m. Chairman: Dr. Amnuay Tapingkae

Rapporteur: Dr. Annie B. Elliott

Papers presented by:

1. Dr. S. Ramani: *Higher Education and the Needs of the Masses: A Case Study*

2. Prof. Dr. med. Joachim Holz: *The Multilateral Function of Universities in Indonesia*
3. Dr. med. Frank-Peter Schelp: *Education for the Development of Health Services for the Rural Population in Parts of Thailand*
4. Dr. Rainer Jerosch: *The Impact of the Masses on Higher Education*
5. Dr. H. Detlef Kammeier: *The Human Settlements and Development Programme at the Asian Institute of Technology (A.I.T.)*

Discussants:
1. Prof. Dr. Ran Soo Kim
2. Dr. Reinhold Lischka
3. Prof. Wu Teh-Yao
4. Dr. Rudiger Wagner

General Discussion

Saturday, 3 September 1977

Morning *Plenary Session IV*

9.00 a.m. – 12.00 noon Chairman: Dr. V.C. Venkatesh

Rapporteur: Dr. Annie B. Elliott

Papers presented by:

1. Dr. Ridad Agoes: *Changing of Curriculum in Pajajaran Medical School: A Micro-implication of "Higher Education and the Masses" in Indonesia*
2. Mr. Chana Kasipar: *Meeting the Demands of Thai Industry and the Masses*
3. Mr. Tom Wyant: *Education of Bachelors and Masters of Technical Education at the King Mongkut's Institute of Technology*
4. Dr. Basim Raif Bulos: *Research in the Natural Sciences in the Arab Countries with Special Reference to Jordan*
5. Prof. Dirk Bronger: *The Dilemma of Developing-Country Research*

Discussants:
1. Prof. Dr. Frithjof Manfred Kuhnen
2. Dr. S. Ramani
3. Prof. Dr. W. Riesenkönig

General Discussion

2.00 – 3.30 p.m. Steering Committee Meeting

4.00 - 6.00 p.m. Working Groups based on three functions of the University (A. Teaching, B. Research, and C. Community Service)

Working Group A: Teaching

Chairman: Miss Marga E. Schmitz

Rapporteur: Mr. Tom Wyant

Working Group B: Research

Chairman: Dr. V.C Venkatesh

Rapporteurs: Dr. Werner Aufderlandwehr
Dr. H. Detlef Kammeier

Working Group C: Community Service

Chairman: Prof. Dr. Frithjof Manfred Kuhnen

Rapporteur: Dr. Bikas C. Sanyal

6.00 - 8.00 p.m. Country Group: India

Sunday, 4 September 1977

Free

Monday, 5 September 1977

9.00 a.m. - 12.00 noon Working Groups (Continued)

2.00 - 5.00 p.m. Working Groups (Continued)

6.00 - 8.00 p.m. Country Group: Jordan

7.30 - 11.00 p.m. DAAD Staff Meeting

8.30 - 11.00 p.m. GTZ Staff Meeting

Tuesday, 6 September 1977

Morning *Plenary Session V*

9.00 a.m. - 12.00 noon Chairman: Dr. med. Frank-Peter Schelp

Rapporteur: Dr. Annie B. Elliott

Working Groups Interim Reports

General Discussion

Integration of Interim Reports

Afternoon *Phase III: Regional Cooperation in Higher Education in Serving the Basic Needs of the Masses*

2.00 - 5.00 p.m. Plenary Session VI

Chairman: Dr. Bikas C. Sanyal

Rapporteur: Dr. Annie B. Elliott

Papers and statements presented by:

1. Mr. Raja Roy Singh: *Unesco's Activities in Higher Education in Asia*
2. Prof. Prachoom Chomchai: *ASAIHL's Role in Promoting Regional Cooperation in Higher Education*
3. Dr. S. Nasution: *RIHED's Activities in Promoting Regional Cooperation*
4. Prof. H. Meyer: *The Asia Foundation*
5. Mrs. Tai Yu-Lin: *SEAMEO's Regional Cooperation*
6. Dr. H. Detlef Kammeier: *The Asian Institute of Technology (A.I.T.) — A Case Study of International Cooperation in Higher Education and Research*

Discussant: Prof. Dr. Ran Soo Kim

General Discussion

5.00 - 5.30 p.m. Steering Committee Meeting
5.00 - 6.00 p.m. Country Group: Afghanistan

6.00 - 7.00 p.m. Country Group: Thailand

Wednesday, 7 September 1977

Morning *Phase IV: Conclusions for German/Asian University Cooperation*

9.00 a.m. - 12.30 p.m. *Plenary Session VII*

Chairman: Dr. H. Detlef Kammeier

Rapporteur: Dr. Annie B. Elliott

Papers presented by:

1. Prof. Dr. Hans Wolfgang Riesenkonig: *Helping to Create and Keep Qualified Academic Staff in Universities of Developing Countries.*
2. Dr. Dietrich Herrmann: *Some Remarks Concerning the Integration of an Isolated Expert and His Possibility of Influence within the Field between the Two Partners*
3. Dr. Werner Aufderlandwehr: *The History and*

Some Evaluation of the Kabul University Partnership in Respect of the Faculty of Economics

Discussant: Prof. Dr. med. Joachim Holz

General Discussion

Statements presented by:

1. Dr. Wolfgang Armbruster: *Higher Education and the Masses — Impact on Objectives and Instruments of International Cooperation with Institutions of Higher Education in Asia*
2. Dr. Wolfgang Küper: *General Comments*
3. Miss Marga E. Schmitz: *Clarification given on and sought by DAAD*

General Discussion

Afternoon Free

1.30 - 3.00 p.m. Steering Committee Meeting

5.30 p.m. Country Group: Philippines

8.30 p.m. Country Group: Korea

Thursday, 8 September 1977

9.00 a.m. - 4.30 p.m. Working Groups on various forms of cooperation related to institutions of higher education classified as: A. Metropolitan, B. Local, and C. Regional

4.30 - 5.45 p.m. Special Lecture by Mr. Tom Wyant: *Management Techniques and Their Use in Education*

6.00 p.m. Country Group: Indonesia

Friday, 9 September 1977

Morning *Plenary Session VIII*

9.00 a.m. - 12.45 noon Chairman: Mr. Hartmut Glimm

Rapporteur: Dr. Annie B. Elliott

Working Groups Final Reports

General Discussion

Integration of Final Reports

Afternoon *Plenary Session IX*

2.30 - 5.30 p.m. Chairman: Dr. S. Nasution

Rapporteur: Dr. Annie B. Elliott

Summaries and Recommendations

Closing Session

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APPENDIX B

LIST OF PARTICIPANTS

I) Asian Participants

a) From GTZ Sponsored Projects

Dr. Ridad Agoes, Universitas Pajajaran, Lembaga Parasitologi, Jalan Dipati Ukur 46, Bandung, Indonesia

Dr. Basim Raif Bulos, Department of Physics, Faculty of Science, University of Jordan, Amman, Jordan

Mr. Chana Kasipar, Dean, Faculty of Technical Education and Science, King Mongkut's Institute of Technology, Pibulsongkram Road, P.O. Box 8/17, Bangkok 8, Thailand

Mr. Harry Sosrohadisewoyo, Laboratorium Konversi Enersi Listrik, Institut Teknologi Bandung, Jalan Ganeca 10, Bandung, Indonesia

Dr. Ediz Ulusoy, EGE Universitesi Ziraat Fakultesi, Makina Kursusu, Bornova, Izmir, Turkey

Dr. V.C. Venkatesh, Professor of Mechanical Engineering and Professor-in-charge, Industrial Consultancy Centre, Indian Institute of Technology, Madras 600036, India

b) Participants Invited in their Personal Capacity as Experts

Prof. Prachoom Chomchai, Executive Secretary, ASAIHL Secretariat, Ratasastra Building, Chulalongkorn University, Henri Dunant Road, Bangkok, Thailand

Dr. Victor M. Ordonez, Secretary General, Association of Christian Universities and Colleges in Asia, De La Salle University, 2401 Taft Avenue, Manila, Philippines

Dr. S. Ramani, Professor of Industrial Engineering and Industrial Management and Head, Department of Humanities and Social Sciences, Indian Institute of Technology, Madras 600036, India

Prof. Dr. Ran Soo Kim, Professor of Education and Chairman, Accreditation Committee of Graduate and Professional Schools, Ministry of Education, Department of Education, Yonsei University, Seoul, South Korea

Dr. Bikas C. Sanyal, International Institute for Educational Planning (Unesco), 7 Rue Eugene Delacroix, 75016 Paris, France

Mr. Raja Roy Singh, Director, Unesco Regional Office for Education in Asia, P.O. Box 1425, Bangkok, Thailand

Dr. A.O.B. Situmorang, Head, Subdirectorate of Higher Education Organisation Development, Ditjen Pendidikan Tinggi (Direc-

torate General for Higher Education), Department of Education and Culture, Jalan Jenderal Sudirman, Pintu Satu Senayan, Jakarta, Indonesia

Dr. Swasdi Skulthai, Director, Bureau of Science and Technology, ASEAN Secretariat, 6 Jalan Taman Pejambon, Jakarta, Indonesia

Dr. Wichit Srisa-an, Deputy Undersecretary of State, Office of University Affairs, Rajadamnern Nork Avenue, Bangkok 2, Thailand

Dr. Amnuay Tapingkae, President, Payap College, P.O. Box 161, Keo Navarat Road, Chiang Mai, Thailand

Prof. Wu Teh-Yao, Professor and Dean, College of Graudate Studies, Nanyang University, Upper Jurong Road, Singapore 22, Republic of Singapore

c) Official Representatives from Institutions in Asia

Mr. P. Arumainathan, Member, RIHED Governing Board and Deputy Secretary, Ministry of Science and Technology, Kay Siang Road, Singapore 10, Republic of Singapore

Mr. Kwan Sai Kheong, Member, RIHED Governing Board and Vice-Chancellor, University of Singapore, Bukit Timah Road, Singapore 10, Republic of Singapore

Miss Jane Harris, Fellowship Officer, The Agricultural Development Council (ADC), Tanglin P.O. Box 84, Singapore 10, Republic of Singapore

Prof. Henry H. Meyer, Visiting Professor/Consultant, The Asia Foundation, Room 1008, Cathay Building, Mt. Sophia, Singapore 9, Republic of Singapore

Mrs. Tai Yu-Lin, Director, SEAMEO Regional Language Centre, RELC Building, 30 Orange Grove Road, Singapore 10, Republic of Singapore

II) German Participants

a) Sponsored by GTZ

Dr. Klaus Bandel, c/o Embassy of the Federal Republic of Germany, P.O. Box 183, Amman, Jordan

Prof. Achim Bopp, Department of Electrical Engineering, Colour-TV-Laboratory, Indian Institute of Technology, Madras 600036, India

Dr. Dietrich Herrmann, Former Project Officer and Lecturer, Institut Teknologi Bandung, Indonesia (with GTZ project), c/o Institut fur Elektrische Maschinen, Antriebe und Bahnen, Technische Universitet, 33 Braunschweig, Federal Republic of Germany.

Prof. Dr. Joachim Holz, Director, Institute of Parasitology, Universitas Pajajaran, Jalan Dipati Ukur, Bandung, Indonesia

Dr. Peter H. Hummel, Department of Veterinary Medicine, College of Agriculture, National Taiwan University, 142 Chou San Road, Taipei, Taiwan 107, Republic of China

Prof. Dr. Frithjof Manfred Kuhnen, Director, Institut für Ausländische Landwirtschaft (Institute for Rural Development), Universität Göttingen, Büsgenweg 2, D 34 Göttingen, Federal Republic of Germany

Dr. Reinhold Lischka, EGE Universitesi Ziraat Fakültesi, Zootekni Kürsüsü, Bornova, Izmir, Turkey

Dr. Christian Pertzsch, Korea University, Anam Dong, Sungbuk-GU, Seoul, South Korea

Dr. Klaus Dieter Rehm, c/o Embassy of the Federal Republic of Germany, Jl. Thamrin 7, Jakarta 1, Indonesia

Dr. Jürgen Saeger, Department of Biology, Faculty of Science, University of Jordan, Amman, Jordan

Prof. Dr. Hans Wagner, Adviser, Industrial Consultancy Centre, Indian Institute of Technology, Madras 600036, India

Dr. Rüdiger Wagner, Department of Veterinary Medicine, College of Agriculture, National Taiwan University, 142 Chou San Road, Taipei, Taiwan 107, Republic of China

Mr. Dieter Wenzel, Television Engineer, Colour-TV-Lab., Electrical Engineering Department, 14 Lake View Road, Indian Institute of Technology, Madras 600036, India

Mr. Tom Wyant, Educational Adviser, Thai-German Technical Teacher College (King Mongkut's Institute of Technology), P.O. Box 8/17, Bangkok 8, Thailand

b) Sponsored by DAAD

Dr. Werner Aufderlandwehr, Department of Geography, Faculty of Arts, Chulalongkorn University, c/o 670/155 Soi Thepnimit, Charansnitvong Road, Bangplad-Thonburi, Bangkok 7, Thailand

Prof. Dr. Wolfgang Borgstede, P.O. Box 772, Kabul, Afghanistan

Prof. Dr. Dirk Bronger, Department of Geology and Geography, University of the Philippines, Diliman, P.O. Box 289, Makati, Manila, Philippines

Dr. Dieter Mark Dückert, Professor in City and Regional Planning, College and Graduate School of Architecture and Fine Arts, University of Santo Tomas, c/o 39, 6th Street, New Manila Q.C., Metro Manila, Philippines

Dr. Hans Frey, Assistant Professor, Department of International Relations, Quaid-i-Azam University, Islamabad, Pakistan

Dr. Horst Frischkorn, Lecturer of Physics, Department of Physics, Faculty of Science, University of Azarabadegan, P.O. Box 192, Tabriz, Iran.

Dr. H. Detlef Kammeier, Assistant Professor, Asian Institute of Technology, P.O. Box 2754, Bangkok, Thailand

Prof. Norbert Rau, Professor (Visiting) for Fisheries Biology, Marine Research Office, University of San Carlos, Cebu City, Philippines

Prof. Dr. Hans Wolfgang Riesenkönig, St. Louis University, Baguio City, Philippines

Prof. Dr. Stephen Ruscheweyh, P.O. Box 13, Kabul 1, Afghanistan

Dr. Frank-Peter Schelp, Department of Tropical Nutrition, Faculty of Tropical Medicine, Mahidol University, 420/6 Rajvithi Road, Bangkok, Thailand

Dr. Fred Seligmann, Department of Geology, University of the Philippines Campus, Diliman, 31 Viola St. Area III, 3004 Quezon City, Philippines

Prof. Dr. Rolf E. Vente, Visiting Professor, Department of Sociology, University of Singapore, Bukit Timah Road, Singapore 10

Dr. Wolfgang Zacher, Department of Geology, University of the Philippines Campus, Diliman, 3004 Quezon City, Philippines

c) Official Representatives from German Institutions

Dr. Dirk Angelroth, Director, Goethe-Institut, Jalan Matraman Raya 23, Jakarta-Timur, Indonesia

Dr. Wolfgang Armbruster, Senior Counsellor, Federal Ministry for Economic Cooperation (BMZ), Ref: 301, Karl-Marx-Str. 4-6, D-53 Bonn, Federal Republic of Germany

Dr. Rainer Jeroesch, Senior Counsellor, Federal Ministry for Economic Cooperation (BMZ), Ref. 101, Karl-Marx-Str. 4-6, D-53 Bonn, Federal Republic of Germany

Dr. Wolfgang Küper, German Agency for Technical Cooperation (GTZ), Dag-Hammarskjöld-Weg 1, D-6236 Eschborn, Federal Republic of Germany

Mr. Christian Reiser, German Academic Exchange Service (DAAD), New Delhi Branch Office, 176 Golf Links, New Delhi 110003, India

Miss Marga E. Schmitz, German Academic Exchange Service (DAAD), Kennedyallee 50, D-53 Bonn-Bad Godesberg, Federal Republic of Germany

III) Conference Directors

Mr. Hartmut Glimm, Head, Higher Education Section, German Foundation for International Development (DSE), Simrockstr. 1, D-5300 Bonn, Federal Republic of Germany

Prof. Dr. S. Nasution, Director, Regional Institute of Higher Education and Development (RIHED), CSSDI Building, Heng Mui Keng Terrace, Singapore 5, Republic of Singapore

Dr. Banphot Virasai, Deputy Director, Regional Institute of Higher Education and Development (RIHED), CSSDI Building, Heng Mui Keng Terrace, Singapore 5, Republic of Singapore

Rapporteur

Dr. Annie B. Elliott, Department of Extra-Mural Studies, Institute of Education, Paterson Hill, Singapore 10, Republic of Singapore

APPENDIX C

STEERING COMMITTEE

Members

BMZ	: Dr. Wolfgang Armbruster
GTZ	: Dr. Wolfgang Küper
DAAD	: Miss Marga E. Schmitz
DSE	: Mr. Hartmut Glimm
RIHED	: Dr. S. Nasution
	Dr. Banphot Virasai
German Participant	: Dr. Dietrich Herrmann
Asian Participant	: Dr. S. Ramani

APPENDIX D

LIST OF ACRONYMS

German Institutions and Organisations

BMZ	=	Bundesministerium für wirtschaftliche Zusammenarbeit, Bonn (Federal Ministry for Economic Co-operation)
CDG	=	Carl Duisberg Gesellschaft, Köln
DAAD	=	Deutscher Akademischer Austauschdienst, Bonn-Bad Godesberg (German Academic Exchange Service)
DFG	=	Deutsche ForschungsGemeinschaft, Bonn-Bad Godesberg (German Research Society)
DSE	=	Deutsche Stiftung für internationale Entwicklung, Berlin/Bonn, etc. (German Foundation for International Development)
GTZ	=	Deutsche Gesellschaft für Technische Zusammenarbeit, Eschborn b. Frankfrut (German Agency for Technical Co-operation)

Asian Institutions and Organisations

AIT	=	Asian Institute of Technology, Bangkok
ASAIHL	=	Association of Asian Institutions of Higher Learning
ASEAN	=	Association of South East Asian Nations
IIT	=	Indian Institute(s) of Technology
RIHED	=	Regional Institute of Higher Education and Development, Singapore
SEAMEO	=	Southeast Asian Ministers of Education Organisation
BIOTROP	=	SEAMEO Regional Centre for Tropical Biology, Bogor, Indonesia
INNOTECH	=	SEAMEO Regional Centre for Educational Innovation and Technology, Quezon City, Philippines
RECSAM	=	SEAMEO Regional Centre for Education in Science and Mathematics, Penang, Malaysia
RELC	=	SEAMEO Regional Language Centre, Singapore
SEARCA	=	SEAMEO Regional Centre for Graduate Study and Research in Agriculture, Laguna, Philippines
TROPMED	=	SEAMEO Regional Project for Tropical Medicine and Public Health, Bangkok, Thailand

International Organisations

IAU	=	International Association of Universities, Paris
ICED	=	International Council for Educational Development, New York

APPENDIX E

THE GERMAN FOUNDATION FOR INTERNATIONAL DEVELOPMENT (DSE)

The German Foundation for International Development (DSE) plays an important role in the concept and instruments of the German Federal Government's policy for cooperation with Third World countries. Founded in 1959 as a private institution, DSE has its headquarters in Berlin (West) and is fully financed by the German Federal Government and a few Laender (state governments).

The aims of the German Foundation are based on the principles which the German Federal Government has established for its development policy. These aims, whose realisation is sought through far-reaching cooperation with numerous institutions at both national and international levels, are:

- to contribute to the improvement of bilateral, regional, and international cooperation with Third World countries by convening intranational and international conferences, expert meetings, and seminars;
- to provide further training for high- and middle-level personnel from Third World countries by short- and long- term training programmes in various fields of specialization;
- to train German technical assistance personnel before their assignment to projects abroad, by courses of two to three months' duration;
- to contribute to decision-making in development policy by providing information and documentation services for the Government and agencies.

For these purposes the following divisions have been established:

- Education, Science and Documentation Division, Bonn;
- Seminar Centre for Economic and Social Development, Berlin (West);
- Area Orientation Centre, Bad Honnef;
- Public Administration Promotion Centre, Berlin (West);
- Industrial Occupations Promotion Centre, Mannheim;
- Food and Agriculture Development Centre, Feldafing near Munich.

DSE's Subdivision for Education and Science aims at contributing, by its various activities, to the educational reforms and to strengthening the scientific capacity of developing countries. The activities are concentrated on two fields of priority:

- Basic education, formal and non-formal, especially in rural areas of Africa south of the Sahara, and
- Higher education and the promotion of scientific research in developing countries.

By providing a platform for the international exchange of experience through seminars, conferences and expert meetings, the Higher Education Section tries to assist developing countries in taking innovative approaches towards improving their higher education systems, understood as factors of socio-economic development, with special emphasis on agricultural and

engineering education for the needs of the masses. At the same time, it assists in the evaluation and advancement of German assistance to higher education and in the coordination among German and foreign institutions active in this field. In addition, a training programme on principles and techniques of teaching and learning has been established for staff at Faculties of Agriculture in Africa. In all the endeavours of the DSE, cooperation with national, international and regional institutions, like the Regional Institute of Higher Education and Development (RIHED) in Singapore, is a natural desire and has led to encouraging results.

APPENDIX F

EXTRACTS FROM THE EDUCATIONAL AND SCIENTIFIC AID PROGRAMME OF THE FEDERAL REPUBLIC OF GERMANY (DECEMBER 1971)

- Judging by the experience gained during the First Development Decade, education and science will make a decisive contribution to the improvement of living conditions of the people in developing countries, to social justice and to cultural and political self-determination only if they enable people to take an active part in the work for national economic and social progress. This calls for the activation of the will for and the ability to undertake self-help, for innovation, for social integration, and for the political involvement of large segments of the population, and also for the creation of the necessary foundation for these developments in the sphere of education and science, especially through a more equitable distribution of social opportunities.

.....

- Efforts to change the function and structure of education are being made all over the world. Both industrial countries and developing countries are faced with the need for life-long learning, a flexible adjustment of the educational system to changing social and economic tasks, as well as for new curricula and teaching methods. This creates new possibilities for their cooperation but at the same time increases the risk of transferring to the developing countries solutions which are not suited to their requirements. Cooperation on the basis of partnership therefore requires us to be both conscious of our own situation and at the same time prepared to help resolve the problems peculiar to the developing countries.

.....

- The purpose of educational and scientific aid should be to help reduce the dependence of many developing countries on foreign models, supplies and contributions in these fields and to prevent the emergence of dependence in other respects which could be the case, for instance, where the educational technologies of industrial countries are transferred without due consideration.

.....

- Personnel seconded under contract with the appropriate German authorities are to carry out above all advisory activities, studies, and assignments which also involve the initial or further training of counterparts. The aim of this is to ensure that German specialists will not occupy posts in developing countries which should be reserved to local specialists so that responsibility can eventually be transferred to them as quickly as possible.

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APPENDIX G

REGIONAL INSTITUTE OF HIGHER EDUCATION AND DEVELOPMENT (RIHED)

RIHED is a regional and autonomous institution established in 1970 for the purpose of stimulating and facilitating cooperation among the universities and the governments of the countries in Southeast Asia, and to enhance the contributions of higher education to the social and economic development of the countries of the region and of the region as a whole. To achieve this primary objective, the activities of RIHED are focused principally on the following:

a) To provide statistical, clearing-house and documentation services;
b) To conduct or arrange for the conduct and publication of studies of ways to extend the contributions of universities to development and of the functioning and organization of universities in this role;
c) To sponsor seminars and conferences;
d) To provide advisory and technical services;
e) To cooperate with other agencies whose objects are related to the objects of the Institute; and
f) To encourage and facilitate inter-university and inter-country cooperation in the planning and conduct of mutually beneficial projects in higher education and development.

At present, the Institute is jointly financed by the Governments of Indonesia, Malaysia, Singapore, and Thailand. Its research activities are continuously supported by Unesco and other private foundations.